

CURRICULUM VITAE

Rik DERYNCK

Date of birth: September 15, 1952 in Torhout, Belgium

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I. Studies

a) University of Louvain (Belgium)

Faculty of Sciences, Department of Biology

"Licentiate Zoology": completed in 1974, magna cum laude

Dissertation thesis: "Role of the pseudobranch in the Salmonidae"

b) University of Ghent (Belgium)

Faculty of Sciences, Department of Biology in the Laboratory of Molecular Biology (Prof. Dr. W. Fiers).

Ph.D. degree in sciences (zoology: physiological-biochemical direction), 1981
summa cum laude

Dissertation thesis: "Cloning, identification and characterization of a human fibroblast interferon gene" (supervisor: Prof. Dr. W. Fiers)

Diploma of fully qualified teacher for higher education , 1977, cum laude.

EXHIBIT A

II. Professional Appointments

From September 1, 1981 to March 4, 1985: Scientist in the Department of Molecular Biology, Genentech Inc., South San Francisco

From March 5, 1985 to December 31, 1987: Senior Scientist in Department of Molecular Biology, Genentech Inc., South San Francisco.

From January 1, 1988 to September 30, 1990: Senior Scientist in Department of Developmental Biology, Genentech Inc., South San Francisco.

From September 17, 1990 to January 31, 1991: Adjunct Associate Professor in the Department of Growth and Development, University of California at San Francisco

From September 30, 1990 to March 31, 1991: Visiting Scientist in Department of Developmental Biology, Genentech Inc., South San Francisco.

From February 1, 1991 to March 31, 1991: Acting Professor in the Department of Growth and Development, and the Department of Anatomy, University of California San Francisco

From April 1, 1991 to 2004: Professor,
Department of Growth and Development

From April 1, 1991 to present: Department of Anatomy
PIBS Program in Cell Biology
University of California San Francisco

July 1, 1994: promotion to Professor, step II.

July 1, 1997: promotion to Professor, step III

July 1, 1999: promotion to Professor, step IV

July 1, 2002: promotion to Professor, step V

July 1, 2003: promotion to Professor, step VI

July 1, 2006: promotion to Professor, step VIII

From late 2004 to present: Professor
Department of Cell and Tissue Biology
(new department due to reorganization)

From May 1992 to present: Member, PIBS Program in Developmental Biology
Member, Program in Molecular Medicine

From July 1992 to present: Member, Program in Biomedical Sciences

From November 1993 to present: Member of the Cardiovascular Research Institute

From 1998 to present: Member of the UCSF Cancer Center

From 2002 to present: Director of the Program in Craniofacial and Mesenchymal Biology

From 2004 to present: Vice Chair of the Department of Cell and Tissue Biology

From 2005 to present: Co-Director of the UCSF Institute for Stem Cell and Tissue Biology, now called UCSF Institute for Regeneration Medicine

III. Additional Professional Activities

- Member of Editorial Advisory Board of J. NCI (1988-1992)
- Member of Editorial Board of J. Cell. Biochem. (1988-present)
- Member of Editorial Board of J. Cell. Physiol. (1996-present)
- Member of Editorial Board of Cytokine and Growth Factor Reviews (1996-2000)
- Member of Editorial Board of Molecular Biology of the Cell (1999- present)
- Member of Editorial Board of Cytokine (2000-present)

- Invited Member of the American Association of Cancer Research (1991- present)
- Invited Member of the American Society of Cell Biology (1992- present)

- Organizer UCLA symposium on "Growth and Differentiation Factors in Embryonic Development", 1990
- Organizer Keystone symposium on "Growth and Differentiation Factors in Vertebrate Development", 1992
- Member of the organizing committee of the AACR meeting on "The Molecular Biology of Cancer", Interlaken, Switzerland, March 1994
- Member of Local Organizing Committee for the 6th International Congress on Cell Biology/36th American Society of Cell Biology Annual Meeting, San Francisco December 7-11, 1996.
- Co-organizer of the "18th International Symposium on Cancer", Sapporo (Japan), July 7-9, 1998.
- Chair, Local Arrangements Committee of the 38th American Society of Cell Biology Annual Meeting, San Francisco, December 12-16, 1998.
- Organizer of FASEB Meeting on "TGF- β Superfamily: Signaling and Development", Tucson, Arizona, July 7-12, 2001.
- Organizer of FASEB Meeting on "TGF- β Superfamily: Signaling and Development", Tucson, Arizona, July 12-17, 2003.
- Organizer of AACR Conference on "TGF- β family in cancer and other diseases", La Jolla, California, February 8-12, 2006.

IV Reviewing grants and manuscripts.

- Ad hoc member of various site visits for NIH (1986- present)
- Member AACR Rhoads Award Committee, 1993
- Member ACS study section on Biochemistry and Endocrinology, February 1996
- Member of Board of Scientific Counselors of NIH-NIDCR (1994-1999)
- Ad hoc member NIH study section "Cell Biology and Physiology II", June 1998
- Member of special NIH study section on "Mathematical modeling of biological systems", June 2000.
- Ad hoc member NIH study section "Cell Biology and Physiology II", June 2000

- Ad hoc reviewer of intramural research at The National Cancer Institute, 2001.
- Member of Special Grants Review Committee, NIDCR, 2003
- Member of Special Emphasis Panel (Institutional Research Training Grants), NIDCR, 2003
- Ad hoc member NIH study section "Cell Development and Function I", 2003.
- Ad hoc reviewer of intramural research at The National Cancer Institute, 2004.
- Ad hoc member NIH study section "Tumor Microenvironment I", 2004.

Reviewing manuscripts (1984-2000)

Biochemistry, Biochimica et Biophysica Acta, Cancer Research, Cell, Cell Growth and Differentiation, Current Biology, Development, Developmental Biology, The EMBO Journal, Endocrinology, Gastroenterology, Genes and Development, The Journal of Biological Chemistry, The Journal of Cell Biology, The Journal of Cell Science, The Journal of Clinical Investigation, The Journal of Experimental Medicine, Molecular Biology of the Cell, Molecular Cell, Molecular Carcinogenesis, Molecular and Cellular Biology, Molecular Endocrinology, Nature, Nature Genetics, Nature Medicine, Oncogene, Proc. Natl. Acad. Sci. USA, Science

since 2000, restricted to:

Cell, Development, Developmental Cell, The EMBO Journal, Genes and Development, The Journal of Cell Biology, The Journal of Experimental Medicine, Molecular Biology of the Cell, Molecular Cell, Molecular and Cellular Biology, Nature, Nature Genetics, Nature Medicine, Nature Structural and Molecular Biology, Proc. Natl. Acad. Sci. USA, Science

Grant application reviewer for:

- American Cancer Society (1996)
- National Science Foundation
- Department of Energy
- Medical Research Council (Great Britain)
- Nederlandse Kankerbestrijding (The Netherlands)
- Human Science Frontiers
- The Wellcome Trust
- The Israel Science Foundation
- National Science Council (Taiwan)
- March of Dimes
- Vlaams Instituut voor Biotechnologie (Belgium)

V. Award:

- UCSF School of Dentistry "Distinguished Research Award" 2001.

VI. INVITED LECTURES.

Brugge, Belgium: May 5-7, 1975

Conference: Genome structure and function

Coventry, England: April 3-15, 1978

University of Warwick: EMBO/FEBS Course on "New Aspects of Interferon Research", with a subsequent interferon meeting (organization: D.C. Burke)

Brussels, Belgium: June 19-21, 1978

Free University of Brussels:

Meeting: Francqui Colloquium on Differentiation

Ghent, Belgium: Sept. 13-15, 1978

University of Ghent:

Special course: Clinical Immunology

Köln, Germany: March 15-17, 1979

University of Cologne:

"Spring meeting" on molecular biology of the genome

Paris, France: March 14, 1980

Institut Pasteur

Meeting: "Réunion des Interféronistes"

Antwerp, Belgium: June 6, 1980

University of Antwerp

Joint meeting of the Dutch and Belgian Biochemical Societies

Bethesda, Maryland USA.: Sept. 8-9, 1980

National Institutes of Health

NIH/WHO Workshop on interferon cloning

Kortrijk, Belgium: Sept. 18, 1980

University of Leuven at Kortrijk

Meeting of the "Interferon Contact Group"

Basel, Switzerland: Sept. 22-28, 1980

Friedrich Miescher Institute

EMBO course on cosmid cloning (org.: B. Hohn)

Washington, D.C. USA.: Nov. 9-12, 1980

First International Congress for Interferon Research (org.: W.E. Stewart II)

Baltimore, Maryland USA: Nov. 13, 1980

John Hopkins University Medical School (Dr P. Pitha)

New York, New York USA.: Nov. 14, 1980
New York University Medical School (Dr. J. Vilcek)

San Francisco, California USA: Nov. 18-19, 1980
Genentech Inc. (Dr. D. Goeddel)

Brussels, Belgium: March 26, 1981
at Institut Pasteur du Brabant
Meeting of the Interferon Contact Group

Geneva, Switzerland: March 31, 1981
Biogen S.A. (Dr. J. Davies)

Rotterdam, The Netherlands: April 21-24, 1981
Congress: The Biology of the Interferon System (org. G. Galasso, E. De Maeyer and
H. Schellekens)

San Francisco, California USA: Oct. 21-23, 1981
2nd International Congress on Interferon Research (org. W.E. Stewart)

Squaw Valley, California USA: March 8-12, 1982
ICN-UCLA Symposium: Chemistry and Biology of Interferons: Relationship to Therapeutics

Haverford, Pennsylvania USA: August 1-5, 1982
3rd International Lymphokine Workshop: "Interleukins, Lymphokines and Cytokines"
(org.: S. Cohen)

Seattle, Washington USA: September 8-15, 1982
13th International Cancer Congress (org.: UICC)

Rotterdam, The Netherlands: April 18-22, 1983
2nd International TNO Meeting on the Biology of the Interferon System

Frederick, Maryland USA: May 10-11, 1983
National Cancer Institute: Biological Response Modifiers Program: Retreat on future
directions in growth and differentiation factors research

Washington, D.C. USA: May 31-June 3, 1983
International Symposium on Thymic Hormones and Lymphokines, (org.: Dr. A. Goldstein)

Vienna, Austria: August 29-September 2, 1983
International Congress on Chemotherapy: Interferon Symposium, plenary speaker

Park City, Utah USA: March 25-30, 1984
ICN-UCLA Symposium on "Membrane Receptors and Cellular Recognition"

Bethesda, Maryland USA: June 6-8, 1984
NIH (Dr. M. Sporn)

Heidelberg, West Germany: July 6, 1984
EMBL Laboratory (Dr. B. Vennström)

Vienna, Austria: July 7, 1984
E. Boehringer Institute (Dr. P. Swetly)

Cold Spring Harbor, New York USA: September 19-23, 1984
Conference on "Growth Factors and Transformation"

Park City, Utah USA: February 2-8, 1985
Triton Biosciences-UCLA Symposium on "Perspectives in Inflammation, Neoplasia and Vascular Cell Biology"

Steamboat Springs, Colorado USA: April 6-13, 1985
Abbott-UCLA Symposium on "Biochemical and Molecular Epidemiology of Cancer"

Anaheim, California USA: April 21-26, 1985
69th Annual FASEB Meeting: Symposium on "Growth Factors and Cancer"

Paris, France: May 29-31, 1985
Pasteur-Weizmann Symposium: "From Gene Deregulation to Human Malignancy"

Rochester, Minnesota USA: July 15, 1985
Mayo Clinic (Dr. H. Moses)

Seattle, Washington USA: July 16, 1985
University of Washington (Dr. S. Schwartz)

Ghent, Belgium: August 13, 1985
University of Ghent (Dr. W. Fiers)

Brussels, Belgium: August 17, 1985
Institut Pasteur du Brabant (Dr. J. Content)

Heidelberg, West Germany: September 16-19, 1985
EMBO Meeting on "Growth Factors, Receptors and Oncogenes"

Oslo, Norway: January 7, 1986
Radium Hospital (Dr. R. Ohlsson)

Uppsala, Sweden: January 8, 1986
Minisymposium "Growth Factors and Cancer" (org. B. Westermark),

Helsinki, Finland: January 9-10, 1986
Symposium "Role of oncogenes in human cancer" (org. K. Alitalo)

Santa Barbara, California USA: February 3-7, 1986

Gordon Conference on "The chemistry and biology of peptides"

Granlibakken, California USA: February 12-15, 1986

UCLA Workshop on "Molecular Mechanisms of Hormone Action"

Seattle, Washington USA: February 28-March 1, 1986

Cardiovascular Research Program Retreat at University of Washington (org. R. Ross)

Steamboat Springs, Colorado USA: April 6-12, 1986

- UCLA Symposium on "Growth Factors, Tumor Promoters and Cancer Genes"
- UCLA Symposium on "Interferon as Cell Growth Factors and Tumor Inhibitors"

Palo Alto, California USA: April 18, 1986

Syntex Corporation (Dr. D. Eppstein)

Oslo, Norway: May 15-16, 1986

Symposium: Growth Factor Cascades: Mechanisms and Opportunities for Intervention"

Cold Spring Harbor, New York USA: May 28-June 4, 1986

Cold Spring Harbor Symposium on "Molecular Biology of Homo Sapiens"

Concord, New Hampshire USA: August 11-16, 1986

Gordon Conference on "Peptide Growth Factors"

Berkeley, California USA: October 6, 1986

Lawrence Berkeley Laboratories lecture series

Atlanta, Georgia USA: October 8, 1986

Emory University (Dr. A. Richmond)

Nashville, Tennessee USA: October 10, 1986

Vanderbilt University Medical School (Dr. H. Moses)

Seillac, France: October 12 - 15, 1986

INSERM conference on "Growth factors: role in development and pathology"

Springfield, Virginia USA: October 31, 1986

Meloy Laboratories (Drs. A. Schreiber and Y. Schlessinger)

Cold Spring Harbor, New York USA: November 2 - 5, 1986

Banbury workshop on "Tumor Angiogenesis Factor"

Seattle, Washington USA: November 10, 1986

Oncogen Corp.(Dr. G. Todaro)

Park City, Utah USA: January 17-23, 1987

UCLA Symposium: Growth regulation of cancer

Palo Alto, California USA: April 24-25, 1987
34th Annual Symposium of the Tissue Culture Association

Bethesda, Maryland USA: June 3-4, 1987
NIH Conference on "Angiogenesis" (Org: J. Folkman)

Meriden, New Hampshire USA: June 22-26, 1987
Gordon Conference on "Atherosclerosis"

Brussels, Belgium, July 4-11, 1987
XIth International Conference on "Thrombosis and Hemostasis"

Meriden, New Hampshire USA, July 13-17, 1987
Gordon Conference on "Molecular and genetic basis of cell proliferation",

Hamburg, West Germany, September 6-11, 1987
3rd International Congress on "Hormones and Cancer"

New York City, New York, USA, November 7-10, 1987
Memorial Sloan Kettering Institute (Dr. J. Mendelsohn)

Keystone, Colorado USA, January 24-30, 1988
UCLA Symposium: Growth factors and their receptors: genetic control and rational application

Keystone Colorado USA, January 24-30, 1988
UCLA Symposium: Growth inhibitors and cytotoxic polypeptides

Tucson, Arizona USA, February 29, 1988
University of Arizona (Dr. M. Kore)

Phoenix, Arizona USA, February 28 - March 3, 1988
32nd Annual Meeting of the Biophysical Society

Smithville, Texas USA, March 28-30, 1988
Growth, differentiation and cancer: growth factors and growth factor receptors

Nashville, Tennessee USA, April 27, 1988
Vanderbilt University Medical School (Dr. H. Moses)

St. Louis, Missouri USA, April 28, 1988
Washington University (Dr. G. Pierce)

Kyoto, Japan, July 17-23, 1988
8th International Congress of Endocrinology

Newport, Rhode Island USA, August 7-12, 1988
Gordon Conference on "Peptide Growth Factors"

Cold Spring Harbor, New York USA, September 9-11, 1988
Molecular Diagnostics of Human Cancer

New Haven, Connecticut USA, October 31- November 2, 1988
Conference on "Growth factors and wound healing"

New Haven, Connecticut USA, November 2, 1988
Yale University Medical School (Dr. R. Halaban)

Boston, Massachusetts USA, November 3, 1988
Mass. General Hospital/ Harvard Medical School (Dr. D. Podolsky)

San Francisco, California USA, December 16, 1988
University of California, San Francisco, Department of Reproductive Biology

Palo Alto, California USA, January 12, 1989
Stanford University Medical School (Dr. R. Roth)

San Francisco, California USA, January 19, 1989
University of California, San Francisco, Department of Anatomy

Keystone, Colorado USA, January 21-27, 1989
UCLA Symposium: Growth regulation of Cancer II

Carmel, California USA, February 8-9, 1989
Symposium of the Western Society for Investigative Dermatology

Vancouver, Canada, February 15-18, 1989
International Symposium on Effects of Therapy on Biology and Kinetics of Surviving Tumor

Lake Tahoe, California USA, March 9-12, 1989
UCLA Workshop: Regulatory Pathways in Differentiation and Cell Reproduction, organizer

New York, New York USA, March 14, 1989
New York University Medical School (Dr. C. Basilico)

New York, New York USA, March 15, 1989
Albert Einstein College of Medicine (Dr. R. Stanley)

Oxford, England, March 20-22, 1989
Growth Inhibitors: pre-clinical and clinical evaluation in cancer

Nice, France, March 23, 1989
Université de Nice (Dr. M. Lazdunski)

Paris, France, March 24, 1989

Institut Pasteur (Dr. D. Strossberg)

San Diego, California USA, April 18, 1989

University of California, Department of Pharmacology (Dr. H. Leffert)

Berkeley, California USA, May 31, 1989

Lawrence Berkeley Laboratories (Dr. M. Stampfer)

New York, New York USA, June 7, 1989

Cornell University Medical School (Dr. C. Nathan)

London, England, June 27, 1989

Charing Cross Surrey Research Centre (Dr. M. Feldman)

London, England, June 28, 1989

Glaxo Ltd (Dr. M. Rupniak)

London, England, June 29, 1989

I. C. R. F. (Dr. F. Balkwill)

Gent, Belgium, July 4, 1989

University of Gent (Dr. W. Fiers)

Vienna, Austria, July 14, 1989

Institute of Molecular Pathology (Dr. M. Busslinger)

Amsterdam, the Netherlands, July 20, 1989

The Netherlands Cancer Institute (Dr. R. Nusse)

Ames, Iowa USA, August 25-28, 1989

Epidermal growth factor and related proteins in development

Duarte, California USA, August 30, 1989

City of Hope Research Center (Dr. B. Carr)

San Antonio, Texas USA, September 19, 1989

University of Texas Health Science Center (Dr. D. Papermaster)

Nashville, Tennessee USA, November 6, 1989

Vanderbilt University Medical School (Dr. H. Moses)

Boston, Massachusetts USA, January 8, 1990

Dana Farber Cancer Institute, Harvard Medical School (Dr. C. Stiles)

New Haven, Connecticut USA, January 9, 1990

Yale University Medical School (Dr. S. Weissman)

New York, New York USA, January 10, 1990
New York University Medical School (Dr. J. Vilcek)

Chicago, Illinois USA, January 23, 1990
Ben May Institute, University of Chicago (Dr. G. Greene)

Seattle, Washington USA, January 24, 1990
University of Washington (Dr. S. Schwartz)

La Jolla, California USA, February 2, 1990
Scripps Institute (Dr. D. Loskutoff)

Lorne, Victoria, Australia, February 15-18, 1990
Growth Factors and Cancer (Dr. A. Burgess, org.)

Lorne, Victoria, Australia, February 19-22, 1990
Genome Conference (Dr. P. Schofield, org.)

Taos, New Mexico USA, March 2, 1990
NIH Workshop on the Control of Gene Expression (Dr. G. Ehrenspeck, org.)

Taos, New Mexico USA, March 3-9, 1990
UCLA Symposium: Negative Controls on Cell Growth

San Diego, California USA, March 13, 1990
University of California, Department of Biology (Dr. S. Hedrick)

Durham, North Carolina USA, March 22, 1990
Duke University Medical School (Dr. R. Bell)

Steamboat Springs, Colorado USA, March 31-April 6, 1990
UCLA Symposium: Growth and Differentiation Factors in Embryonic Development,
organizer and speaker

San Francisco, California USA, April 23, 1990
University of California San Francisco, Dept. Growth and Development (Dr. A. Kahn)

San Francisco, California USA, May 23, 1990
University of California San Francisco, Endocrine Rounds (Dr. D. Shoback)

London, Great Britain, June 11-14, 1990
Ciba Foundation Symposium No 157: Clinical Applications of TGF-beta

Copper Mountain, Colorado USA, July 8-13, 1990
FASEB Conference: Regulation of Gene Expression in Higher Animals

University Park, Pennsylvania USA, July 25-27, 1990

Penn State's 9th Summer Symposium in Molecular Biology: Molecular Pathways of Cell Growth Control

Vancouver, Canada, July 29-August 2, 1990

6th International Conference on Differentiation of Normal and Neoplastic Cells

Newport, Rhode Island USA, August 5-10, 1990

Gordon Conference on Peptide Growth Factors

Boston, Massachusetts USA, September 19, 1990

Harvard University Medical School, Dept. Cell Physiology (Dr. H. Green)

San Francisco, California USA, November 1, 1990

Gladstone Foundation, U. C. San Francisco (Dr. T. Innerarity)

Keystone, Colorado USA, April 1-8, 1991

Keystone Symposium on "Wound Repair"

Steamboat Springs, Colorado USA, April 1-8, 1991

Keystone Symposium on "Cancers of the Aerodigestive Tract"

Ann Arbor, Michigan USA, May 2, 1991

Vascular Biology: Adhesion Molecules and Gene Expression

Houston, Texas USA, May 15-18, 1991

82nd Annual Meeting of the AACR

Oxford, England, August 27-29, 1991

First European Tissue Repair Society Meeting: "New Insights"

Santa Margherita Ligure, Italy, November 6-9, 1991

Joint EACR-AACR Meeting

San Francisco, California USA, November 22, 1991

Growth Factors, Development and the Lung

Jerusalem, Israel, December 8-13, 1991

Prospective Trends in Calcified Tissue Research

Keystone, Colorado USA, January 26-February 2, 1992

Keystone Symposium on "Negative Growth Control", session chairman and speaker

Keystone, Colorado USA, April 3-11, 1992

Keystone Symposium on "Growth and Differentiation Factors in Vertebrate Development", organizer and speaker

Thousand Oaks, California USA, May 5, 1992

Amgen Corp. (Dr. D. Wen)

Capri, Italy, September 21-23, 1992

Workshop on Growth Factors and Development, session chairman and speaker

Paris, France, September 24, 1992

Ecole Normale Supérieure (Drs. J.P. Thiéry and Y. Barrandon)

San Diego, California USA, November 10-14, 1992

Seventh International Symposium on the Biology of Vascular Cells

Denver, Colorado USA, November 15-19, 1992

Thirty-second Annual Meeting of the American Society of Cell Biology

Leuven, Belgium, November 19-21, 1992

ESF workshop on The Transforming Growth Factor- β Family, session chairman and speaker

Palo Alto, California USA, January 13, 1993

Stanford University Medical School (Dr. Richard Pratt)

New York, New York USA, May 4, 1993

New York University Medical School (Dr. Leslie Gold)

Cambridge, Massachusetts USA, May 6, 1993

Whitehead Institute, M.I.T (Dr. Robert Weinberg)

Boston, Massachusetts USA, June 1, 1993

Massachusetts General Hospital, Charlestown (Dr. Paolo Dotto)

Nashville, Tennessee USA, June 2, 1993

Vanderbilt University Medical School (Dr. Harold Moses)

Cincinnati, Ohio USA, June 22, 1993

University of Cincinnati (students of Molecular Genetics Program)

Beerse, Belgium, August 5, 1993

Janssen Research Foundation (Dr. Josée Leysen)

Hilton Head Island, South Carolina USA, October 28-30, 1993

Ninth Annual Forbeck Forum: Growth Factors (Org. Dr. J. Mendelson)

Tokyo, Japan, November 9-11, 1993

24th International symposium of the Princess Takamatsu Cancer Research Fund:
"Molecular and cellular basis for cell to cell interactions: its significance in cancer".
session chairman and speaker

San Francisco, California, December 2-3, 1993

First Conference of the Tobacco-Related Disease Research Program.

Chapel Hill, North Carolina USA, December 15, 1993
University of North Carolina, Lineberger Cancer Center (Dr. David Lee)

Tokyo, Japan, January 25-27, 1994
Molecular Mechanisms for Cell Differentiation (Org. Dr. M. Noda)

Thousand Oaks, California USA, February 4, 1994
Amgen Corp. (Dr. D. Wen)

Interlaken, Switzerland, March 5-11, 1994
Growth Factors, Development and Cancer (Org. Drs. B. Groner and H. Moses)

Pittsburgh, Pennsylvania USA, April 13, 1994
University of Pittsburgh Medical Center (Dr. D. Becker)

San Francisco, California USA, April 15, 1994
U.C.S.F. Symposium on Morphogenesis and Remodeling of Connective Tissues

San Francisco, California USA, April 22, 1994
U.C.S.F., San Francisco General Hospital (Dr. D. Sheppard)

Bethesda, Maryland USA, May 3-6, 1994
TGF- β s: Biological Mechanisms and Clinical Applications (Org. Drs. K. Piez and M. Sporn)

Charlottesville, Virginia USA, May 25, 1994
University of Virginia Medical School (Dr. G. Owens)

Charlottesville, Virginia USA, May 26-29, 1994
Mechanisms of Sensory Regeneration (Org. J. Corwin)

Vail, Colorado USA, June 25-29, 1994
Growth Factors in the Gastro-Intestinal Tract (R. Coffey, org.)

Palo Alto, California USA, July 6, 1994
DNAX (Dr. Martin McMahon)

San Francisco, California USA, July 26, 1994
UCSF Minisymposium on Bone Biology (Dr. C. Arnaud)

Kansas City, Kansas USA, September 9-13, 1994
Annual Meeting of the American Society of Bone and Mineral Research

Palo Alto, Stanford, California USA, October 20-23, 1994
Society for Basic Urologic Research Fall Symposium (Dr. D. Peehl)

Philadelphia, Pennsylvania USA, October 26, 1994
The Wistar Institute (Dr. Ulrich Rodeck)

Vienna, Austria, March 10, 1995
Institute of Molecular Pathology (Dr. Erwin Wagner)

Kloster Irsee, Germany, March 10-13, 1995
Symposium "Molecular mechanisms in dermal-epidermal interactions" (Dr. T. Krieg)

Houston, Texas USA, April 20, 1995
Baylor Medical School (Dr. Gregor Eichele)

Nashville, Tennessee USA, April 21, 1995
Vanderbilt University Medical School (Dr. Harold Moses)

Helsinki, Finland, May 26-28, 1995
EMBO/NorFa Workshop: Growth Factors and Receptor Kinases (Dr. K. Alitalo)

Tilton, New Hampshire USA, July 17-21, 1995
Gordon Research Conference on Epithelial Differentiation and Keratinization
(Dr. T.-T. Sun)

Meriden, New Hampshire USA, July 30-August 4, 1995
Gordon Research Conference on Hormone Action (Dr. P. Mellon)

New Haven, Connecticut, October 10, 1995
Yale Medical School Cancer Center (Dr. Vincent De Vita)

Bethesda, Maryland, October 12, 1995
National Cancer Institute (Dr. Anita Roberts)

San Francisco, California USA, January 12, 1996
San Francisco General Hospital (Dr. Joel Ernst)

Dallas, Texas USA, February 23, 1996
University of Texas Southwestern Medical Center (Dr. R. Hammer)

Washington, D.C. USA, March 28-31, 1996
International Symposium on Biology of Prostate Growth

Meriden, New Hampshire USA, August 11-16, 1996
Gordon Research Conference on Peptide Growth Factors (Dr. M Klagsbrun)

Cold Spring Harbor, New York USA, August 28 - September 1, 1996
Cold Spring Harbor Meeting on Mouse Molecular Genetics (Dr. A. Bradley)

Kobe, Japan, September 6, 1996
Symposium on Signal Transduction (Dr. Y. Nishizuka)

Los Angeles, California USA, October 21, 1996
University of Southern California (Dr. M. Stallcup)

New Orleans, Louisiana USA, November 3-6, 1996
29th American Society of Nephrology

San Francisco, California USA, December 8-11, 1996
36th Annual Meeting of the American Society of Cell Biology.
6th International Congress on Cell Biology

Portland, Oregon USA, January 24, 1997
Oregon Regional Primate Research Center/Oregon Health Sciences University
(Dr. Sergio Ojeda)

Madrid, Spain, February 10-12, 1997.
Instituto Juan March Workshop on "TGF- β signaling in development and cell cycle control" (C. Bernabeu and J. Massagué, org.)

Berkeley, California USA, April 15, 1997
University of California at Berkeley, Merck lecture (invited by student committee)

Memphis, Tennessee USA, April 25, 1997
University of Tennessee, Memphis, Forum on Cancer Research

San Diego, California USA, August 16-20, 1997
Salk/EMBL Meeting on Oncogenes and Growth Control (T. Hunter, I. Verma, and T., Graf, org.)

Alba, Italy, October 4-6, 1997
Anabolic Agents in Bone (D. Agnusdei and E. Canalis, org.)

Tokyo, Japan, February 2-3, 1998
Symposium: Molecular Signaling in Development, Cell Differentiation and Proliferation (M. Noda, org.)

Tokyo, Japan, February 3, 1998
The Japanese Cancer Institute (Dr. Kohei Miyazono)

Taipei, Taiwan, July 2, 1998
The National Taiwan University Medical School (Dr. Ruey-Hwa Chen)

Taipei, Taiwan, July 3, 1998
Academia Sinica, Institute of Molecular Biology (Dr. Hsin-Fang Yang-Yen)

Sapporo, Japan, July 7-9, 1998
18th International Symposium on Cancer: Regulation of Machinery for Cancer Cell Growth, Immortality, Apoptosis and Invasion (Dr. Y. Niitsu, org.)

Meriden, New Hampshire USA, August 9-14, 1998
Gordon Research Conference on Peptide Growth Factors (J. Massagué, org)

Shanghai, P.R. China, October 9, 1998
Shanghai Institute of Biochemistry, Academia Sinica (Dr. J. Song)

Beijing, P.R. China, October 11, 1998
Tsinghua University, Dept. of Biological Sciences (Dr. A. Meng)

Kyoto, Japan, November 2, 1998
Kyoto University, Institute of Virus Research (Dr. Y. Ito)

Tokyo, Japan, November 4, 1998
Ninth Japanese TGF- β meeting (Dr. N. Ueno)

Cleveland, Ohio USA, February 5, 1999
Cleveland Clinic Foundation (Dr. Phil Howe)

South San Francisco, California USA, February 10, 1999
Fibrogen Corporation (Dr. G. Martin)

Loma Linda, California USA, March 10, 1999
Loma Linda Medical School (Dr. G. Molinaro)

Loma Linda, California USA, March 10, 1999
Veterans Administration Medical Center (Dr. M. Subburaman)

South San Francisco, California USA, March 11, 1999
Eos Biotechnology, Inc. (Dr. H. Heyneker)

South San Francisco, California USA, March 23, 1999
Tularik Corp. (Dr. D. Goeddel)

Helsinki, Finland, May 17, 1999
University of Helsinki (Drs. Kari Alitalo and Päivi Miettinen)

Stockholm, Sweden, May 18, 1999
Karolinska Institute (Drs. Ralf Pettersson and Björn Obrink)

San Diego, California USA, June 12-15, 1999
Endo '99, 81st Annual Meeting of the Endocrine Society

Boston, Massachusetts USA, July 2, 1999
Harvard Medical School (Dr. B. Olsen)

Hershey, Pennsylvania USA, August 23, 1999

Penn State Medical College (Dr. K. Mulder)

Seoul, Korea, September 16, 1999
Soon Chun Hyang University (Dr. Hyun Ju Ha)

Seoul, Korea, September 17, 1999
7th International Symposium of the Korea Cancer Center Hospital (Dr. Young Sook Son)

Bethesda, Maryland USA, September 20-22, 1999
TGF- β : Biological Mechanisms and Clinical Applications (Drs. A. Roberts and M. Sporn).

New York, New York, November 4, 1999
New York University Medical School (Dr. D. Levy)

Miami, Florida USA, November 5-8, 1999
American Society of Nephrology 38th Annual Meeting

Hilton Head Island, South Carolina USA, December 5-9, 1999
Seventh Annual Conference of the International Cytokine Society

San Francisco, California USA, January 21, 2000
The Gladstone Institute (Dr. D. Dicheck)

Tokyo, Japan, March 10, 2000
Symposium: "Merging Cell Regulation" (Dr. Y. Ikawa, Tokyo Medical and Dental University)

San Francisco, California USA, April 14, 2000
The U.C.S.F. Cancer Center (Dr. M. McMahon)

San Diego, California USA, April 15-18, 2000
Conference: FASEB Meeting: Experimental Biology 2000

Meriden, New Hampshire USA, August 13-18, 2000
Gordon Conference (Dr. C.-H. Heldin, org)

Houston, Texas USA, November 7, 2000
Baylor College of Medicine (Dr. G. Karsenty)

Charlottesville, Virginia USA, November 8, 2000
University of Virginia Medical School (Dr. R. Ogle)

Bethesda, Maryland USA, November 29 - December 1, 2000
NCI Workshop on "Mechanisms of Tumor Metastasis to the Bone" (Drs. D. Roodman and A.H. Reddi)

Galveston, Texas USA, December 7, 2000
University of Texas Medical Branch (Dr. T. Ko)

New Orleans, Louisiana USA, March 24-28, 2001
92nd Annual Meeting of the AACR

Rochester, Minnesota USA, April 20, 2001
Mayo Clinic (Dr. E. Leof)

Seattle, Washington USA, April 24, 2001
Virginia Mason Research Center (Dr. Tongwen Wang)

Il Ciocco, Italy, May 13-18, 2001
Gordon conference on Matrix Metalloproteases (Org: H. Birkedal-Hansen)

Tucson, Arizona USA, July 7-12, 2001
FASEB conference on "TGF- β Superfamily: Signaling and Development" (Org: Drs. A. Roberts and R. Derynck)

Dallas, Texas USA, February 10-13, 2002
48th Annual Meeting of the Orthopaedic Research Society

Philadelphia, Pennsylvania USA, March 7-10, 2002
AACR Special Conference: Colon Cancer: Genetics to Prevention (Org: Drs. A.K. Rustgi and R. Kucherlapati)

San Francisco, California USA, April 6-10, 2002
93rd Annual Meeting of the AACR

San Francisco, California USA, May 19-22, 2002
International "Digestive Disease Week" Conference

Tucson, Arizona USA, June 15-20, 2002
FASEB conference on Advances in Tetraspanin Research (Org: Drs. M. Hemler and C. Boucheix)

San Francisco, California USA, June 19-22, 2002
ENDO 2002 (The Endocrine Society)

Boston, Massachusetts USA, October 29-30, 2002
AstraZeneca Conference on Growth Factor Signaling in Cancer

Birmingham, Alabama USA, October 31, 2002
University of Alabama (Dr. Richard Mayne)

Cold Spring Harbor Laboratories, December 8-11, 2002

Banbury Workshop on Glucocorticoid Regulatory Mechanisms and Pathophysiology
(org: K. Yamamoto and D. Granner)

La Jolla, California USA, January 15-19, 2003

AACR Special Conference: The TGF- β Superfamily: Roles in the Pathogenesis of
Cancer and Other Diseases (Org: Drs. A.B. Roberts and J. Massagué)

New York, New York USA, April 10, 2003

New York University Medical School (Dr. Jan Vilcek)

Glasgow, Scotland, July 6-9, 2003

Beatson International Cancer Conference:
Cell Signaling and Cancer (Org: Dr. Brad Ozanne et al.)

Tucson, Arizona USA, July 12-17, 2003

FASEB conference on "TGF- β Superfamily: Signaling and Development" (Org: Drs.
R. Derynck and R. Lechleider)

San Francisco, California USA, December 13-17, 2003

43rd Annual Meeting of the American Society of Cell Biology.

Worcester, Massachusetts USA, February 24, 2004

University of Massachusetts Medical School (Dr. Kai Lin)

Berlin, Germany, March 23-27, 2004

Annual Meeting of the German Society of Cell Biology

Gent, Belgium, March 29, 2004

University of Gent (Dr. G. Haegeman)

Washington DC, April 17-21, 2004

FASEB Meeting, Experimental Biology 2004

Tokyo, Japan, May 7, 2004

University of Tokyo (Dr. T. Taniguchi)

Pine Mountain, Georgia USA, June 19-24, 2004

FASEB conference on Advances in Tetraspanin Research (Org: Dr. E. Rubinstein)

South San Francisco, California, USA, July 1, 2004

Genentech Inc. (Drs. M. Tessier-Lavigne and E. Filvaroff)

Pacific Grove, California, USA, August 27-30, 2004

COAST conference on Craniofacial Skeletal Engineering

San Antonio, Texas, USA, October 16-19, 2004

Annual Conference of the American College of Rheumatology

Palo Alto, California, USA, January 6, 2005
Stanford University Medical School (Dr. Rabinovitch)

Millbrae, California, USA, January 27-28, 2005
GTCbio Conference on Cytokines and Inflammation

Burlingame, California, USA, April 26-27, 2005
The 2005 Stem Cell Symposium

Nashville, Tennessee, USA, May 20, 2005
Vanderbilt-Ingram Cancer Center Retreat (Dr. Ann Richmond)

Snowmass, Colorado USA, June 25-30, 2005
FASEB conference on "TGF- β Superfamily: Signaling and Development" (Org: Drs. R. Lechleider and C. Hill)

Washington, DC USA, September 13, 2005
Georgetown University Medical School (Dr. L. Mishra)

U.C. Irvine, California, USA, September 16-17, 2005
4th Annual California Tissue Engineering Meeting

Boston, Massachusetts, USA, November 14, 2005
Forsyth Institute, Harvard Medical School (Dr. Onir Leshem, postdoc invitation)

San Francisco, California, USA, December 10-14, 2005
43rd Annual Meeting of the American Society of Cell Biology

La Jolla, California USA, February 8-12, 2006
AACR Special Conference: The TGF- β Superfamily: Roles in the Pathogenesis of Cancer and Other Diseases (Org: Drs. A.B. Roberts, J. Massagué and R. Derynck)

San Francisco, California, USA, February 22, 2006
UCSF, Developmental and Stem Cell Biology Program (Dr. A. Kriegstein)

San Francisco, California, USA, March 17, 2006
Symposium on "Mesenchymal Stem Cells and Skeletal Biology"
(Org: Drs. C. Damsky, R. Derynck and R. Schneider)

Chicago, Illinois, USA, March 19-23, 2006
51st Annual Meeting of the Orthopaedic Research Society

Ann Arbor, Michigan, USA, April 26, 2006
University of Michigan Schools of Medicine/Dentistry (Dr. C.-Y. Wang)

Framingham, Massachusetts USA, May 12, 2006

Genzyme Corporation (Dr. Scott Lonning)

Thousand Oaks, California USA, May 19, 2006

Amgen Corporation (Dr. H.Q. Han)

Los Angeles, California USA, May 20-26, 2006

Digestive Disease Week

South San Francisco, California USA, June 26, 2006

Genentech Inc. (Dr. June Lee)

Portland, Maine USA, July 6, 2006

Maine Medical Center (Dr. Leif Oxburgh)

Tucson, Arizona USA, July 22-27, 2006

FASEB conference on Membrane Organization by Tetraspanins and Small Multi-transmembrane Proteins (Org: Drs. M. Wright and T.-T. Sun)

Tokyo, Japan, November 10, 2006

Japanese Foundation for Cancer Research (Dr. Kohei Miyazono)

La Jolla, California USA, December 4-5, 2006

Osaka University Forum in San Diego: Frontier of Biomedical Research and Beyond.

VII PUBLICATIONS (most important papers are marked with asterisk)

- 1) DERYNCK, R., and FIER, W. (1977) A two-dimensional electrophoretic procedure for the separation of restriction fragments. J. Mol. Biol. 110, 387-404.
- 2) DERYNCK, R., and FIER, W. (1977) Two-dimensional electrophoretic separation of restriction fragments. Arch. Internat. Physiol. Biochim. 85, 167-168.
- 3)* DERYNCK, R., CONTENT, J., DECLERCQ, E., VOLCKAERT, G., TAVERNIER, J., DEVOS, R., and FIER, W. (1980) Isolation and structure of a human fibroblast interferon gene. Nature 285, 542-547.
- 4)* DERYNCK, R., REMAUT, E., SAMAN, E., STANSSENS, P., DECLERCQ, E., CONTENT, J., and FIER, W. (1980) Expression of human fibroblast interferon gene in *Escherichia coli*. Nature 287, 193-197.
- 5) DERYNCK, R., DEVOS, R., REMAUT, E., SAMAN, E., STANSSENS, P., TAVERNIER, J., VOLCKAERT, G., CONTENT, J., DECLERCQ, E., and FIER, W. (1981) Isolation and characterization of a human fibroblast interferon gene and its expression in *Escherichia coli*. Reviews in Infectious Diseases, ed. A.S. Huang, vol. 3, 1186-1195. Review.
- 6) TAVERNIER, J., DERYNCK, R., and FIER, W. (1981) Evidence for a unique human fibroblast interferon (IFN- β 1) chromosomal gene, devoid of intervening sequences. Nucl. Acids Res. 9, 461-471.
- 7) DEGRAVE, W., DERYNCK, R., TAVERNIER, J., HAEGEMAN, G., and FIER, W. (1981) Nucleotide sequence of the chromosomal gene for human fibroblast (β 1) interferon and of the flanking regions. Gene 14, 137-143.
- 8) DERYNCK, R. (1981) Het menselijk interferon gen. Chemie Magazine Jrg. 7, nr. 1. Review.
- 9) DERYNCK, R., DEGRAVE, W., GHEYSEN, D., HAEGEMAN, G., TAVERNIER, J., REMAUT, E., STANSSENS, P., SAMAN, E., LEEMANS, R., and FIER, W. (1981) Studies of the human fibroblast interferon gene cloned in *Escherichia coli*. In *The Biology of the Interferon System*, eds. De Maeyer, E., Galasso, G. en Schellekens, H., p. 57-62.
- 10) VOLCKAERT, G., TAVERNIER, J., DERYNCK, R., DEVOS, R., and FIER, W. (1981) Molecular mechanisms to explain nucleotide sequence rearrangements observed in cDNA clones of human fibroblast interferon mRNA. Gene 15, 215-223.
- 11) GRAY, P.W., LEUNG, D.W., PENNICA, D., YELVERTON, E., NAJARIAN, R., SIMONSEN, C.C., DERYNCK, R., SHERWOOD, P.J., WALLACE, D.M., BERGER, S.L., LEVINSON, A.D., and GOEDDEL, D.V. (1982) Expression of human immune interferon in *E. coli* and monkey cells. Nature 295, 503-508.

- 12) CONTENT, J., DE WIT, L., PIERARD, D., DERYNCK, R., DE CLERCQ, E., and FIER, W. (1982) Secretory proteins induced in human fibroblasts under conditions used for the production of interferon β (IFN- β). Proc. Natl. Acad. Sci. USA 79, 2768-2772.
- 13) DERYNCK, R., GRAY, P.W., YELVERTON, E., LEUNG, D.W., SHEPARD, H.M., LAWN, R.M., ULLRICH, A., NAJARIAN, R., PENNICA, D., HAGIE, F.E., HITZEMAN, A., SHERWOOD, P.J., LEVINSON, A.D., and GOEDDEL, D.V. (1982) Synthesis of human interferons and analogs in heterologous cells. In *From Gene to Protein: Translation into Biotechnology* (Ahmed, F., Schultz, J., Smith, E.E. and Whelan, W.J., eds.) Academic Press, New York, p. 249-259. Review.
- 14) SIMONSEN, C.C., SHEPARD, H.M., GRAY, P.W., LEUNG, D.W., PENNICA, D., YELVERTON, E., DERYNCK, R., SHERWOOD, P.J., LEVINSON, A.D., and GOEDDEL, D.V. (1982) Plasmid-directed synthesis of human immune interferon in *E. coli* and monkey cells. in *The Interferons* (eds. T.C. Merigan, R.M. Friedman, and C.F. Fox), Academic Press, Proceedings of the UCLA Symposia on Molecular Biology, XXV, p. 1-14. Review.
- 15) CONTENT, J., DE WIT, L., DERYNCK, R., DE CLERCQ, E., and FIER, W. (1982) *In vitro* cotranslational processing of human pre-interferon β_1 enhances its biological activity. Virology 122, 466-470.
- 16) DERYNCK, R., LEUNG, D.W., GRAY, P.W., and GOEDDEL, D.V. (1982) Human interferon γ is encoded by a single class of mRNA. Nucl. Acids Res. 10, 3605-3615.
- 17) HITZEMAN, R.A., HAGIE, F.E., HAYFLICK, J.S., CHEN, C.Y., SEEBURG, P.H., and DERYNCK, R. (1982) The primary structure of the *Saccharomyces cerevisiae* gene for 3-phosphoglycerate kinase. Nucl. Acids Res. 10, 7791-7808.
- 18) FIER, W., DEGRAVE, W., DERYNCK, R., DEVOS, R., GHEYSEN, D., REMAUT, E., STANSSENS, P., TAVERNIER, J., CONTENT, J., and DERYNCK, R. (1982) The human interferon gene(s) and their expression in heterologous cells. Princess Takamatsu Symposia 12, 227-236. Review.
- 19) FIER, W., DEGRAVE, W., DERYNCK, R., DEVOS, R., GHEYSEN, D., REMAUT, E., STANSSENS, P., TAVERNIER, J., CONTENT, J., and DE CLERCQ, E. (1982) The human fibroblast interferon gene(s) and their expression in heterologous cells. In *Primary and Tertiary Structure of Nucleic Acids and Cancer Research* (M. Miwa et al., eds.) Japan Sci. Soc. Press, Tokyo, p. 227-236. Review.
- 20) REMAUT, E., DERYNCK, R., DEVOS, R., CHEROUTRE, H., CONTENT, J., CONTRERAS, R., DEGRAVE, W., GHEYSEN, D., STANSSENS, P., TAVERNIER, J., TAYA, Y., VAN HEUVERSWYN, H., and FIER, W. (1982) Expression of human fibroblast and human immune interferon genes in homologous and heterologous cells. In *Interaction of Translational and Transcriptional Controls in the regulation of*

Gene Expression (M. Grunberg-Manago and B. Safer, eds.) Elsevier Scientific Publishing Company, p. 435-446. Review.

- 21) DERYNCK, R., HITZEMAN, R.A., GRAY, P.W., and GOEDDEL, D.V. (1983) Expression of human interferon- γ in heterologous systems. In *Experimental Manipulation of Gene Expression* (M. Inouye, ed.) Academic Press, 247-258.
- 22) DERYNCK, R., SINGH, A., and GOEDDEL, D.V. (1983) Expression of the human interferon- γ cDNA in yeast. Nucl. Acids Res. 11, 1819-1837.
- 23) CONTENT, J., and DERYNCK, R. (1983) Les interférons en morceaux. La Recherche 14, 232-235.
- 24) DERYNCK, R. (1983) Genetic engineering and recombinant techniques for the production of interferon. Proceedings of the 13th International Congress of Chemotherapy, Vienna (Austria) August 28 - September 2, Symposium Interferon, p. 202/4-202/13. Review.
- 25) DERYNCK, R. (1983) More about interferon cloning. *Interferon 5* (I. Gresser, ed.) Academic Press p. 181-203. Review.
- 26)* DERYNCK, R., ROBERTS, A.B., WINKLER, M.E., CHEN, E.Y., and GOEDDEL, D.V. (1984) Human transforming growth factor- α : precursor structure and expression in *E. coli*. Cell 38, 287-297.
- 27) PENNICA, D., NEDWIN, G.E., HAYFLICK, J.S., SEEBURG, P.H., DERYNCK, R., PALLADINO, M.A., KOHR, W.J., AGGARWAL, B.B., and GOEDDEL, D.V. (1984) Human tumor necrosis factor: precursor structure, expression and homology to lymphotoxin. Nature 312, 724-729.
- 28) DERYNCK, R., ROBERTS, A.B., EATON, D.H., WINKLER, M.E., and GOEDDEL, D.V. (1985) Human transforming growth factor- α : precursor sequence, gene structure and heterologous expression. In *Cancer Cells*, vol. 3, 79-86, Cold Spring Harbor Laboratories. Review.
- 29) SMITH, J.M., SPORN, M.B., ROBERTS, A.B., DERYNCK, R., WINKLER, M.E., and GREGORY, H. (1985) Human transforming growth factor- α causes precocious eyelid opening in newborn mice. Nature 315, 515-516.
- 30) TASHJIAN, A.H., JR., VOELKEL, E.F., LAZZARO, M., SINGER, F.R., ROBERTS, A.B., DERYNCK, R., WINKLER, M.E., and LEVINE, L. (1985) Human transforming growth factors- α and - β stimulate prostaglandin production and bone resorption in cultured mouse calvariae. Proc. Natl. Acad. Sci. USA 82, 4535-4538.
- 31) BRISSSENDEN, J.E., DERYNCK, R., and FRANCKE, U. (1985) Mapping of transforming growth factor- α gene to human chromosome 2 close to the breakpoint of the Burkitt lymphoma t(2:8) variant translocation. Cancer Res. 45, 5593-5597.

- 32)* DERYNCK, R., JARRETT, J.A., CHEN, E.Y., EATON, D.H., BELL, J.R., ASSOIAN, R.K., ROBERTS, A.B., SPORN, M.B., and GOEDDEL, D.V. (1985) Human transforming growth factor- β cDNA sequence and expression in normal and transformed cell lines. Nature 316, 701-705.
- 33) STERN, P.H., KRIEGER, N.S., NISSENSON, R.A., WILLIAMS, R.D., WINKLER, M.E. DERYNCK, R., and STREWLER, G.J. (1985) Human transforming growth factor- α stimulates bone resorption *in vitro*. J. Clin. Invest. 76, 2016-2019.
- 34) IBBOTSON, K.J., HARROD, J., GOWEN, M., D'SOUZA, S., WINKLER, M.E., DERYNCK, R., and MUNDY, G.R. (1986) Human recombinant transforming growth factor- α stimulates bone resorption and inhibits formation *in vitro*. Proc. Natl. Acad. Sci. USA 83, 2228-2232.
- 35) DERYNCK, R., JARRETT, J.A., CHEN, E.Y., and GOEDDEL, D.V. (1986) The murine transforming growth factor- β precursor. J. Biol. Chem. 261, 4377-4379
- 36) KEHRL, J.H., WAKEFIELD, L.M., ROBERTS, A.B., JAKOWLEW, S., ALVAREZ-MON, M., DERYNCK, R., SPORN, M.B., and FAUCI, A.S. (1986) Production of transforming growth factor- β by human T lymphocytes and its potential role in the regulation of T cell growth. J. Exp. Med. 163, 1037-1050.
- 37)* SCHREIBER, A.B., WINKLER, M.E., and DERYNCK, R. (1986) Transforming growth factor- α : a more potent angiogenic mediator than epidermal growth factor. Science 232, 1250-1253.
- 38) FUJII, D., BRISSENDEN, J.E., DERYNCK, R., and FRANCKE, U. (1986) Transforming growth factor- β gene maps to human chromosome 19 long arm and to mouse chromosome 7. Somatic Cell and Molecular Genetics 12, 281-288.
- 39) TAKAHASHI, N., McDONALD, B.R., HON, J., WINKLER, M.E., DERYNCK, R., MUNDY, G.R., and ROODMAN, G.D. (1986) Recombinant human transforming growth factor- α stimulates the formation of osteoclast-like cells in long-term human marrow cultures. J. Clin. Invest. 78, 894-898.
- 40) DERYNCK, R. (1986) Transforming growth factor- α . In *Oncogenes and Growth Control* (T. Graf and P. Kahn, eds.), p. 58-64.
- 41) TASHJIAN, A.H., VOELKEL, E.F., LLOYD, W., DERYNCK, R., WINKLER, M.E., and LEVINE, L. (1986) Actions of growth factors on plasma calcium: epidermal growth factor and human transforming growth factor- α cause elevation of plasma calcium in mice. J. Clin. Invest. 78, 1405-1409.
- 42) HAEGEMAN, G., CONTENT, J., VOLCKAERT, G., DERYNCK, R., TAVERNIER, J., and FIERIS, W. (1986) Structural analysis of the sequence coding for an inducible 26-kDa protein in human fibroblasts. Eur. J. Biochem. 159, 625-632.

- 43)* ROSENTHAL, A., LINDQUIST, P.B., BRINGMAN, T.S., GOEDDEL, D.V., and DERYNCK, R. (1986) Expression in rat fibroblasts of a human transforming growth factor- α cDNA results in transformation. Cell 46, 301-309.
- 44) DERYNCK, R., ROSENTHAL, A., LINDQUIST, P.B., BRINGMAN, T.S., and GOEDDEL, D.V. (1986) Endogenous and heterologous expression of transforming growth factor- α in mammalian cells. Cold Spring Harbor Symp. Quant. Biol. 51, 649-655. Review.
- 45) DERYNCK, R. (1986) Transforming growth factor- α : structure and biological activities. J. Cell. Biochem. 32, 293-304. Review.
- 46) DERYNCK, R. (1987) Structure of transforming growth factors- α and - β and their precursors. In *Oncogenes, genes and growth factors*, (G. Guroff, ed.), 133-163. Review.
- 47) SALOMON, D.S., PERROTEAU, I., KIDWELL, W.R., TAM, J., and DERYNCK, R. (1987) Loss of growth responsiveness to epidermal growth factor and enhanced production of alpha-transforming growth factor in ras-transformed mouse mammary epithelial cells. J. Cell. Physiol. 130, 297-409.
- 48)* DERYNCK, R., GOEDDEL, D.V., ULLRICH, A., GUTTERMAN, J.U., WILLIAMS, R.D., BRINGMAN, T.S., and BERGER, W.H. (1987) Synthesis of messenger RNAs for transforming growth factors- α and - β and the epidermal growth factor receptor by human tumors. Cancer Res. 47, 707-712.
- 49)* KNABBE, C., LIPPMAN, M.E., WAKEFIELD, L.E., FLANDERS, K.L., KASID, A., DERYNCK, R., and DICKSON, R.B. (1987) Evidence that transforming growth factor- β is a hormonally regulated negative growth factor in human breast cancer cells. Cell 48, 417-428.
- 50)*BRINGMAN, T.S., LINDQUIST, P.B., and DERYNCK, R. (1987) Different transforming growth factor- α species are derived from a glycosylated and palmitoylated transmembrane precursor. Cell 48, 429-440.
- 51) FINZI, E., FLEMING, T., SEGATTO, O., PENNIGTON, C., BRINGMAN, T.S., DERYNCK, R., and AARONSON, S.A. (1987) The human transforming growth factor- α coding sequence is not a direct acting oncogene when overexpressed in NIH/3T3 cells. Proc. Natl. Acad. Sci. USA 84, 3733-3737.
- 52) GAN, B.S., HOLLENBERG, M.D., MacCANNELL, K.L., LEDERIS, K., WINKLER, M.E., and DERYNCK, R. (1987) Distinct vascular actions of epidermal growth factor-urogastrone and transforming growth factor- α . J. Pharm. Exp. Ther. 242, 331-337.
- 53) DERYNCK, R., RHEE, L., CHEN, E.Y., and VAN TILBURG, A. (1987) Intron-exon structure of the human transforming growth factor- β precursor gene. Nucl. Acids Res. 15, 3188-3189.

- 54) DERYNCK, R., and RHEE, L. (1987) Sequence of the porcine transforming growth factor- β precursor. Nucl. Acids Res. 15, 3187.
- 55) DERYNCK, R., WINKLER, M.E., and SCHREIBER, A.B. (1987) Transforming growth factor- α induces angiogenesis. In "Angiogenesis: mechanisms and pathobiology" (Rifkin, D.B. and Klagsbrun, N., eds) p. 72-77. Review.
- 56)* COFFEY, R.J., DERYNCK, R., WILCOX, J.N., BRINGMAN, T.S., GOUSTIN, A.S., MOSES, H.L., and PITTELKOW, M.R. (1987) Production and auto-induction of transforming growth factor- α in human keratinocytes. Nature 328, 817-820.
- 57) SMITH, J.J., DERYNCK, R., and KORC, M. (1987) Production of transforming growth factor- α in human pancreatic cancer cells: evidence for a superagonist autocrine cycle. Proc. Natl. Acad. Sci. USA 84, 7567-7570.
- 58) GUTIERREZ, G., MUNDY, G.R., DERYNCK, R., HEWLETT, E.L., and KATZ, M.S. (1987) Inhibition of parathyroid hormone-responsive adenylate cyclase in clonal osteoblast-like cells by transforming growth factor-alpha and epidermal growth factor. J. Biol. Chem. 262, 15845-15850.
- 59) LIU, S.C., SANFILIPPO, B., PERROTEAU, I., DERYNCK, R., SALOMON, D.S., and KIDWELL, W.R. (1987) Expression of transforming growth factor- α (TGF- α) in differentiated rat mammary tumors: estrogen induction of TGF- α production. Molec. Endocrin. 1, 683 -692.
- 60)* WILCOX, J.N., and DERYNCK, R. (1988) Localization of cells synthesizing transforming growth factor- α mRNA in the mouse brain. J. Neurosci. 8, 1901-1904.
- 61) DERYNCK, R. (1988) Transforming growth factor- α : structure and biological activities. In Growth Factors, Tumor Promoters and Cancer Genes, (Colburn, N.H., Moses, H.L., and Stanbridge, E.J. eds) Alan Liss, Inc. p1-12. Review.
- 62) DERYNCK, R. (1988) Expression of transforming growth factor- α in tumor cells, in Progress in Cancer Research and Therapy Vol. 35; Hormones and Cancer 3 (ed. F. Bresciani, R.J.B. King, M.E. Lippman and J.P. Raymond) Raven Press, New York, p. 183-188. Review.
- 63)* WILCOX, J.N., and DERYNCK, R. (1988) Developmental expression of transforming growth factor- α and - β in mouse fetus. Mol. Cell. Biol. 8, 3415-3422.
- 64)* RICHMOND, A., BALENTIEN, E., THOMAS H.G., FLAGGS, G., BARTON, D.E., SPIESS, J., BORDONI, R., FRANCKE, U., and DERYNCK, R. (1988) Molecular characterization and chromosomal mapping of melanoma growth stimulatory activity, a growth factor structurally related to β -thromboglobulin. EMBO J. 7, 2025-2033.
- 65) FINZI, E., KILKENNY, A., STRICKLAND, J.E., BALASCHAK, M., BRINGMAN, T.S., DERYNCK, R., AARONSON, S., and YUSPA, S.H. (1988) TGF- α stimulates

growth of skin papillomas by autocrine and paracrine mechanisms but does not cause neoplastic progression. Molecular Carcinogenesis 1, 7-12.

- 66)* DERYNCK, R. (1988) Transforming growth factor- α . Cell 54, 593-595. Review.
- 67)* DERYNCK, R., LINDQUIST, P.B., LEE, A., WEN, D., TAMM, J., GRAYCAR, J.L., RHEE, L., MASON, A.J., MILLER, D.A., COFFEY, R.J., MOSES, H.L., and CHEN, E.Y. (1988) A new type of transforming growth factor- β , TGF- β 3. EMBO J. 7, 3737-3743.
- 68) JAKOBOVITS, E.B., SCHLOKAT, U., VANNICE, J.L., DERYNCK, R., and LEVINSON, A.D. (1988) The human TGF- α promoter directs transcription initiation from a single site in the absence of a TATA sequence. Mol. Cell. Biol. 8, 5549-5554.
- 69) BARTON, D.E., FOELLMER, B.E., DU, J., TAMM, J., DERYNCK, R., and FRANCKE, U. (1988) Chromosomal mapping of genes for transforming growth factors β 2 and β 3 in man and mouse: dispersion of the TGF- β gene family. Oncogene Res. 3, 323-332.
- 70) DERYNCK, R., LINDQUIST, P.B., TAMM, J., WEN, D., GRAYCAR, J., LEE, A., and CHEN, E.Y. (1988) Transforming growth factor- β : a family of structurally related factors. Progress in Endocrinology 1988 (eds. H. Imura, K. Shizume, and S. Yoshida), Vol.1, 509-516. Review.
- 71)* ELDER, J.T., FISHER, G.J., LINDQUIST, P.B., BENNETT, G.L., PITTELKOW, M., COFFEY, R.J., ELLINGSWORTH, L., DERYNCK, R., and VOORHEES, J.J. (1989) Overexpression of transforming growth factor- α in psoriatic skin. Science 243, 811-814.
- 72) OQUENDO, P., ALBERTA, J., WEN, D., GRAYCAR, J.L., DERYNCK, R., and STILES, C.D. (1989) The platelet derived growth factor-inducible KC gene encodes a secretory protein related to platelet α -granule proteins. J. Biol. Chem. 264, 4133-4137.
- 73)* BRACHMANN, R., LINDQUIST, P.B., NAGASHIMA, M., KOHR, W., LIPARI, T., NAPIER, M., and DERYNCK, R. (1989) Transmembrane TGF- α precursors activate EGF/TGF- α receptors. Cell 56, 691-700.
- 74) PITTELKOW, M.R., LINDQUIST, P.B., ABRAHAM, R., GRAVES-DEAL, R., DERYNCK, R., and COFFEY, R.J. (1989) Induction of transforming growth factor- α expression in human keratinocytes by phorbol esters. J. Biol. Chem. 264, 5164-5171.
- 75) SHANKAR, V., CIARDIELLO, F., KIM, N., DERYNCK, R., LISCIA, D.S., MERLO, G., LANGTON, B.C., SHEER, D., CALLAHAN, R., BASSIN, R.H., LIPPMAN, M.E., HYNES, N., and SALOMON, D.S. (1989) Transformation of an established mouse mammary epithelial cell line following transfection with a human transforming growth factor- α cDNA. Molecular Carcinogenesis 2, 1-11.

- 76) DERYNCK, R., LINDQUIST, P.B., BRINGMAN, T.S., WILCOX, J.N., ELDER, J.T., FISHER, G.L., VOORHEES, J.J., MOSES, H.L., PITTELKOW, M., and COFFEY, R.J. (1989) Expression of the transforming growth factor- α gene in tumor cells and normal cells. Cancer Cells Vol. 7 (Cold Spring Harbor Laboratory), 297-301. Review.
- 77)* LYONS, K., GRAYCAR, J.L., LINDQUIST, P.B., LEE, A., CHEN, E. Y., HOGAN, B., and DERYNCK, R. (1989) Vgr-1, a mammalian gene related to *Xenopus* vg-1, is a member of the transforming growth factor- β gene superfamily. Proc. Natl. Acad. Sci. USA 86, 4554-4558.
- 78) DERYNCK, R. Transforming growth factors- α and- β and their potential roles in neoplastic transformation. (1989) Cancer Treatment and Research Vol 47: Oncogenes (C. Benz and E. Liu, eds.) Kluwer Academic Publishers, 177-195. Review.
- 79) WEN, D., ROWLAND, A., and DERYNCK, R. (1989) Expression and secretion of gro/MGSA by stimulated human endothelial cells. EMBO J. 8, 1761-1766.
- 80) MILLER, D.A., LEE, A., PELTON, R.W., CHEN, E.Y., MOSES, H.L., and DERYNCK, R. (1989) Murine transforming growth factor- β 2 cDNA sequence and expression in adult tissues and embryos. Molec. Endocrin. 3, 1108-1114.
- 81) BASCOM, C.C., WOLFSHOHL, J.R., COFFEY, R.J., MADISEN, L., WEBB, N.R., PURCHIO, A.R., DERYNCK, R., and MOSES, H.L. (1989) Complex regulation of transforming growth factor β 1, β 2 and β 3 mRNA expression in mouse fibroblasts and keratinocytes by transforming growth factor β 1 and β 2. Mol. Cell. Biol. 9, 5508-5515.
- 82) MILLER, D.A., LEE, A., MATSUI, Y., CHEN, E.Y., MOSES, H.L., and DERYNCK, R. (1989) Complementary DNA cloning of the murine transforming growth factor- β 3 precursor and the comparative expression of TGF- β 3 and TGF- β 1 mRNA in murine embryos and adult tissues. Molec. Endocrin. 3, 1926-1934.
- 83)* GRAYCAR, J. L., MILLER, D.A., ARRICK, B.A., LYONS, R.M., MOSES, H.L., and DERYNCK, R. (1989) Human transforming growth factor β 3: recombinant expression, purification and biological activities in comparison with transforming growth factors - β 1 and - β 2. Molec. Endocrin. 3, 1977-1986.
- 84) LYONS, K.M., PELTON, R.W., GRAYCAR, J.L., DERYNCK, R., and HOGAN, B.L.M. (1990) Developmental expression of the murine Vgr-1 gene: a new member of the TGF- β multigene family. In Current communications in molecular biology: molecular genetics of early *Drosophila* and mouse development (M. Capecchi, ed.) (Cold Spring Harbor Laboratories), 109-116. Review.
- 85) ARRICK, B.A., KORC, M., and DERYNCK, R. (1990) Differential regulation of expression of three different transforming growth factor- β species in human breast cancer cell lines by estradiol. Cancer Res. 50, 299-303.
- 86) DICKINSON, M.E., KOBRIN, M. S., SILAN, C.M., KINGSLEY, D.M., JUSTICE, M. J., MILLER, D. A., CECI, J. D., LOCK, L. F., LEE, A., BUCHBERG, A. M.,

- SIRACUSA, L. D., LYONS, K. M., DERYNCK, R., HOGAN, B. L. M., COPELAND, N. G., and JENKINS, N. A. (1990) Chromosomal localization of seven members of the murine TGF- β superfamily suggests close linkage to several morphogenetic mutant loci. Genomics 6, 505-520.
- 87) MILLER, D. A., PELTON, R. W., DERYNCK, R., and MOSES, H. L. (1990) Transforming growth factor- β : a family of growth regulatory peptides. In *Annals of the New York Academy of Sciences Vol. 593: Transforming Growth Factor- β s. Chemistry, Biology and Therapeutics* (K.A Piez and M.B. Sporn), 208-217. Review.
 - 88) DERYNCK, R. (1990) Transforming growth factor- α . Molec. Reprod. Devel. 27, 3-9. Review.
 - 89) DING, A., NATHAN, C., GRAYCAR, J., DERYNCK, R., STUEHR, D. J., and SRIMAL, S. (1990) Macrophage deactivating factor and transforming growth factors- β 1, - β 2, and - β 3 inhibit induction of macrophage nitrogen oxide synthesis by IFN- γ . J. Immunol. 145, 940-944.
 - 90) BALENTIEN, E., HAN, J. H., THOMAS, H. G., WEN, D., SAMANTHA, A. K., ZACHARIAE, C. O., GRIFFIN, P., BRACHMANN, R., WONG, W. L., MATSUSHIMA, K., RICHMOND, A., and DERYNCK, R. (1990) Recombinant expression, biochemical characterization and biological activities of the human MGSA/gro protein. Biochemistry 29, 10225-10233.
 - 91) DERYNCK, R. (1991) Transforming growth factor- α . In *Encyclopedia of Human Biology* (R. Dulbecco, ed.), vol. 7, 625-629. Review.
 - 92) DERYNCK, R. (1991) Transforming growth factor- β . In *Encyclopedia of Human Biology* (R. Dulbecco, ed.) vol 7, 631-638. Review.
 - 93) LUCAS, C., BRINGMAN, T. S., and DERYNCK, R. (1991) Generation of antibodies and assays for transforming growth factor- α . Meth. Enzymol. 198 C, 185-191.
 - 94) THOMAS, H.G., HAN, J.H., BALENTIEN, E., DERYNCK, R., BORDONI, R., and RICHMOND, A. (1991) Purification and characterization of recombinant melanoma growth stimulating activity. Meth. Enzymol. 198 C, 373-383.
 - 95) BALENTIEN, E., MUSSON, B.E., SHATTUCK, R.L., DERYNCK, R., and RICHMOND, A. (1991) Effects of MGSA 1/gro α on melanocyte transformation. Oncogene 6, 1115-1124.
 - 96)* EBNER, R., and DERYNCK, R. (1991) Epidermal growth factor and transforming growth factor- α : differential intracellular routing and processing of ligand-receptor complexes. Cell Regulation 2, 599-612.

- 97) ARRICK, B.A., LEE, A., GRENDALL, R.L., and DERYNCK, R. (1991) Inhibition of translation of transforming growth factor- β 3 mRNA by its 5' untranslated region. Mol. Cell. Biol. 11, 4306-4313.
- 98) LYONS, R.M., MILLER, D.A., GRAYCAR, J.L., MOSES, H.L., and DERYNCK, R. (1991) Differential binding of TGF- β 1, - β 2 and - β 3 by fibroblasts and epithelial cells measured by affinity cross-linking of cell surface receptors. Molec. Endocrin. 5, 1887-1896.
- 99) DERYNCK, R. (1992) The physiology of transforming growth factor- α . Adv. Cancer Res. 58, 27-52.
- 100)*LOPEZ, A.R., COOK, J., DEININGER, P.L., and DERYNCK, R. (1992) Dominant negative mutants of transforming growth factor- β 1 inhibit the secretion of different transforming growth factor- β isoforms. Molec. Cell. Biol. 12, 1674-1679.
- 101)*ARRICK, B.A., LOPEZ, A.R., ELFMAN, F., EBNER, R., DAMSKY, C.H., DERYNCK, R. (1992) Altered metabolic and adhesive properties and increased tumorigenesis associated with increased expression of transforming growth factor- β 1. J. Cell Biol. 118, 715-726.
- 102)*STREULI, C.H., SCHMIDHAUSER, C., KOBRIN, M., BISSELL, M.J., and DERYNCK, R. (1993) Extracellular matrix regulates expression of the TGF- β 1 gene. J. Cell Biol. 120, 253-260.
- 103) ARRICK, B.A., and DERYNCK, R. (1993) Growth regulation by transforming growth factor- β . In *Oncogenes and Tumor Suppressor Genes in Human Malignancies* (C. Benz and E. Liu, eds.) Kluwer Academic Publishers, 255-264. Review.
- 104) GAZIT, D., EBNER, R., KAHN, A.J., and DERYNCK, R. (1993) Modulation of expression and cell surface binding of members of the transforming growth factor- β superfamily during retinoic acid-induced osteoblastic differentiation of multipotential mesenchymal cells. Molec. Endocrinol. 7, 189-198.
- 105)*CHEN, R.-H., EBNER, R. and DERYNCK, R. (1993) Inactivation of the type II receptor reveals two receptor pathways for the diverse TGF- β activities. Science 260, 1335-1338.
- 106)*EBNER, R., CHEN, R.-H., SHUM, L., LAWLER, S., ZIONCHECK, T., LOPEZ, A.R., and DERYNCK, R. (1993) Cloning of a type I TGF- β receptor and its effect on TGF- β binding to the type II receptor. Science 260, 1344-1348.
- 107) PITTELKOW, M.R., COOK, P.W., SHIPLEY, G.D., DERYNCK, R., and COFFEY, R.J., Jr. (1993) Autonomous growth of human keratinocytes requires epidermal growth factor receptor occupancy. Cell Growth and Differentiation 4, 513-521.
- 108) CHANG, H.-L., GILLET, N., FIGARI, I., LOPEZ, A.R., PALLADINO, M.A., and DERYNCK, R. (1993) Increased transforming growth factor- β expression inhibits cell

proliferation in vitro, yet increases tumorigenicity and tumor growth of Meth A sarcoma cells. Cancer Res. 53, 4391-4398.

- 109)*EBNER, R., CHEN, R.-H, LAWLER, S., ZIONCHECK, T., and DERYNCK, R. (1993) Determination of type I receptor ligand specificity by the type II receptors for TGF- β or activin. Science 262, 900-902.
- 110) NABEL, E.G., SHUM, L., POMPILI, V.J., YANG, Z.Y., SAN, H., SHU, H.B., LIPTAY, S., GOLD, L., GORDON, R., DERYNCK, R., and NABEL, G.J. (1993) Direct transfer of transforming growth factor β 1 gene into arteries stimulates fibrocellular hyperplasia. Proc. Natl. Acad. Sci. USA 90, 10759-10763.
- 111) LAWLER, S., CANDIA, A.F., EBNER, R., LOPEZ, A.R., MOSES, H.L., WRIGHT, C.V.E., and DERYNCK, R. (1994) The murine type II TGF- β receptor has a coincident embryonic expression and binding preference for TGF- β 1. Development 120, 165-175.
- 112) BARCELLOS-HOFF, M.-H., DERYNCK, R., TSANG, M.L.-S., and WEATHERBEE, J.A. (1994) Transforming growth factor- β activation in irradiated murine mammary gland. J. Clin. Invest. 93, 892-899.
- 113)*SHUM, L., REEVES, S.A., KUO, A.C., FROMER, E.S., and DERYNCK, R. (1994) Association of the transmembrane TGF- α precursor with a protein kinase complex. J. Cell Biol. 125, 903-916.
- 114)*FILVAROFF, E. H., EBNER, R., and DERYNCK, R. (1994) Inhibition of myogenic differentiation in myoblasts expressing a truncated type II TGF- β receptor. Development 121, 185-195.
- 115) DERYNCK, R. (1994) Transforming growth factor- β . In The Cytokine Handbook (A. Thomson, ed.) Academic Press, Boston, San Diego, 2nd edition, 319-342. Review.
- 116) CHEN, R.-H. and DERYNCK, R. (1994) Homomeric interactions between type II transforming growth factor- β receptors. J. Biol. Chem. 269, 22868-22874.
- 117) GITELMAN, S.E., KOBRIN, M.S., YE, J.-Q, LOPEZ, A.R., LEE, A., and DERYNCK, R. (1994) Recombinant Vgr-1/BMP-6 expressing tumors induce fibrosis and endochondral bone formation in vivo. J. Cell Biol. 126, 1595-1610.
- 118)*DERYNCK, R. (1994) TGF- β receptor-mediated signaling. Trends Biochem. Sci. 19, 548-553. Review.
- 119)*MIETTINEN, P.J., EBNER, R., LOPEZ, A.R., and DERYNCK, R. (1994) TGF- β -induced transdifferentiation of mammary epithelial cells to mesenchymal cells: involvement of type I receptors. J. Cell Biol. 127, 2021-2037.
- 120) DERYNCK, R., CHEN, R.-H., EBNER, R., FILVAROFF, E.H., and LAWLER, S. (1994) An emerging complexity of receptors for transforming growth factor- β . in

Proceedings of the 24th International Symposium of the Princess Takamatsu Cancer Research Fund: Molecular and cellular basis for cell to cell interaction: its significance in cancer (Hirohashi, S., Moses, H.L., Ruoslahti, E., Sugimura, T., Takeichi, M., and Terada, M., eds) Princeton Scientific Publishing Co, 264-275. Review.

- 121) KHERADMAND, F., FOLKESSON, H.G., SHUM, L., DERYNCK, R., PYTELA, R., and MATTHAY, M.A. (1994) Transforming growth factor- α enhances alveolar epithelial cell repair in a new in vitro model. Am. J. Physiol. 267 (Lung Cell. Mol. Physiol. 11), L728-L738.
- 122) GITELMAN, S.E., and DERYNCK, R. (1995) Transforming growth factor- β . in Guidebook to Cytokines and their Receptors (N.A. Nicola, ed.) Oxford University Press, 223-226. Review.
- 123)*ERLEBACHER, A., FILVAROFF, E.H., GITELMAN, S.E., and DERYNCK, R. (1995) Toward a molecular understanding of skeletal development. Cell 80, 371-378. Review.
- 124)*CHEN, R.-H., MOSES, H.L., MARUOKA, E.M., DERYNCK, R., and KAWABATA, M. (1995) Phosphorylation-dependent interaction of the cytoplasmic domains of the type I and type II transforming growth factor- β receptors. J. Biol. Chem. 270, 12235-12241.
- 125) GITELMAN, S.E., KIRK, M., YE, J.-Q., FILVAROFF, E.H., KAHN, A., and DERYNCK, R. (1995) Vgr-1/BMP-6 induces osteoblastic differentiation of pluripotent mesenchymal cells. Cell Growth and Differentiation 6, 827-836.
- 126)*MIETTINEN, P.J., BERGER, J.E., MENESES, J., PHUNG, Y., PEDERSEN, R.A., WERB, Z., and DERYNCK, R. (1995) Epithelial immaturity and multiorgan failure in mice lacking epidermal growth factor receptor. Nature 376, 337-341.
- 127)*CHEN, R.-H., MIETTINEN, P.J., MARUOKA, E.M., CHOY, L. and DERYNCK, R. (1995) A WD-domain protein that is associated with and phosphorylated by the type II TGF- β receptor. Nature 377, 548-552.
- 128) FENG, X.-H., FILVAROFF, E.H., and DERYNCK, R. (1995) Transforming growth factor- β -induced downregulation of cyclin A expression requires a functional TGF- β receptor complex: Characterization of chimeric and truncated type I and type II receptors. J. Biol. Chem. 270, 24237-24245
- 129) DERYNCK, R., and WAGNER, E.F. (1995) Cell differentiation: Editorial overview. Curr. Opin. Cell Biol. 7: Differentiation (R. DERYNCK, and E.F. WAGNER, eds.), 843-844. Review.
- 130) ARRICK, B.A., and DERYNCK, R. (1996) The biological role of transforming growth factor-beta in cancer development. In Molecular Endocrinology of Cancer (J. Waxman, editor). Cambridge University Press, p. 51-78. Review.

- 131)*ERLEBACHER, A. and DERYNCK, R. (1996) Increased expression of TGF- β 2 in osteoblasts results in an osteoporosis-like phenotype. J. Cell Biol. 132, 195-210.
- 132) SHUM, L., MIETTINEN, P.J., and DERYNCK, R. (1996) Transforming growth factor- α . In Human Cytokines: Handbook for Basic and Clinical Research, Vol. II (B. B. Aggarwal and J. U. Gutterman, eds.) Blackwell Scientific Publications, 384-421. Review.
- 133) FENG, X-H, and DERYNCK, R. (1996) Ligand-independent activation of transforming growth factor- β signaling pathways by heteromeric cytoplasmic domains of TGF- β receptors. J. Biol. Chem. 271, 13123-13129.
- 134)*ZHANG, Y., FENG, X.-H., WU, R.-Y., and DERYNCK, R. (1996) Receptor-associated Mad homologues synergize as effectors of the TGF- β response. Nature 382, 168-172.
- 135) FILVAROFF, E.H., and DERYNCK, R. (1996) Induction of myogenesis in mesenchymal cells by MyoD depends on their degree of differentiation. Dev. Biol. 178, 459-469.
- 136) DERYNCK, R. and ZHANG, Y. (1996) Intracellular signaling: The Mad way to do it. Current Biology 6, 1226-1229. Review.
- 137) DERYNCK, R., GELBART, W.M., HARLAND, R.M., HELDIN, C.-H., KERN, S.E., MASSAGUE, J., MELTON, D.A., MLODZIK, M., PADGETT, R.W., ROBERTS, A.B., SMITH, J., THOMSEN, G.H., VOGELSTEIN, B., and WANG, X.-F. (1996) Nomenclature: vertebrate mediators of TGF- β family signals (note). Cell 87, 173.
- 138) SHUM, L., TURCK, C.W., and DERYNCK, R. (1996) Cysteines 153 and 154 of transmembrane transforming growth factor- α are palmitoylated and mediate cytoplasmic protein association. J. Biol. Chem. 271, 28502-28508.
- 139) GITELMAN, S.E., KOBRIN, M., LEE, A., FET, V., LYONS, K., HOGAN, B.L.M., and DERYNCK, R. (1997) Structure and sequence of the mouse *Bmp6* gene. Mammalian Genome 8, 212-214.
- 140) WANG, X.-J., GREENHALGH, D.A., BICKENBACH, J.R., JIANG, A., BUNDMAN, D.S., KRIEG, T., DERYNCK, R., and ROOP, D.R. (1997) Expression of a dominant negative type II transforming growth factor-beta receptor in the epidermis of transgenic mice blocks TGF- β -mediated growth inhibition. Proc. Natl. Acad. Sci. USA 94, 2386-2391.
- 141) ZHANG, Y., MUSCI, T., and DERYNCK, R. (1997) The tumor suppressor Smad 4/DPC 4 as a central mediator of Smad function. Current Biology 7, 270-276.

- 142) WU, R.-Y., ZHANG, Y., FENG, X.-H., and DERYNCK, R. (1997) Heteromeric and homomeric interactions correlate with signaling activity and functional cooperativity of Smad3 and Smad4/DPC4. Molec. Cell. Biol. 17, 2521-2528.
- 143) LAWLER, S., FENG, X.-H., CHEN, R.-H., MARUOKA, E.M., TURCK, C.W., GRISWOLD-PRENNER, I., and DERYNCK, R. (1997) The type II transforming growth factor- β receptor autophosphorylates not only on serine and threonine but also on tyrosine residues. J. Biol. Chem. 272, 14850-14859.
- 144)* FENG, X.-H., and DERYNCK, R. (1997) A kinase subdomain of the transforming growth factor- β (TGF- β) type I receptor determines the TGF- β intracellular signaling specificity. EMBO J. 16, 3912-3923.
- 145) MIETTINEN, P.J., WARBURTON, D., BU, D., ZHAO, J.-S., BERGER, J.E., MINOO, P., ALLEN, L., DOBBS, L., WERB, Z., and DERYNCK, R. (1997) Impaired lung branching morphogenesis in the absence of functional EGF receptor. Dev. Biol. 186, 224-236.
- 146) DERYNCK, R. and FENG, X.-H. (1997) TGF- β receptor signaling. BBA Reviews in Cancer 1333, F105-F150. Review.
- 147) CANDIA, A., WATABE, T., HAWLEY, S.H.B., ONICHTCHOUCK, D., ZHANG, Y., DERYNCK, R., NIEHRS, C., and CHO, K. (1997) Cellular interpretation of multiple TGF- β signals: intracellular antagonism of activin/BVg1 and BMP-2/4 signaling mediated by Smads. Development 124, 4467-4480
- 148)*SERRA, R., JOHNSON, M., FILVAROFF, E.H., LABORDE, J., SHEHAN, D., DERYNCK, R., and MOSES, H.L. (1997) Expression of a cytoplasmically truncated TGF- β type II receptor in mouse skeletal tissue promotes terminal chondrocyte differentiation and an osteoarthritis-like phenotype. J. Cell Biol. 139, 541-552.
- 149) VERLHAC, M.-H., CHEN, R.-H., HANACHI, P., HERSHEY, J.W.B., and DERYNCK, R. (1997) Identification of partners of TIF34, a component of the yeast eIF3 complex, required for cell proliferation and translation initiation. EMBO J. 16, 6812-6822.
- 150) HOM. Y.K., YOUNG, P., WIESEN, J., MIETTINEN, P.J., DERYNCK, R., WERB, Z., and CUNHA, G. (1998) Uterine and vaginal organ growth requires epidermal growth factor receptor (EGFR) signaling from stroma. Endocrinology 139, 913-921.
- 151) GORSKA, A.E., JOSEPH, H., DERYNCK, R., MOSES, H.L., and SERRA, R. (1998) Dominant-negative interference of the TGF- β type II receptor in the mammary gland results in alveolar hyperplasia and differentiation in virgin mice. Cell Growth and Differentiation 9, 229-238.
- 152) DERYNCK, R. (1998) SMAD proteins and mammalian anatomy. (News and Views) Nature 393, 737-739.

- 153) ERLEBACHER, A., FILVAROFF, E.H., YE, J.-Q., and DERYNCK, R. (1998) Osteoblastic responses to TGF- β during bone remodeling. Molec. Biol. Cell 9, 1903-1918.
- 154)* FENG, X.-H., ZHANG, Y., WU, R.-Y., and DERYNCK, R. (1998) The tumor suppressor Smad4/DPC4 and transcriptional adaptor CBP/p300 are coactivators for Smad3 in TGF- β -induced transcriptional activation. Genes Dev. 12, 2153-2163.
- 155) DERYNCK, R. and CHOY, L. (1998) Transforming growth factor- β and its receptors. in *The Cytokine Handbook* (A. Thompson, ed.) Academic Press, Boston, San Diego, 3rd edition, pp. 593-636. Review.
- 156)* ZHANG, Y., FENG, X.-H., and DERYNCK, R. (1998) Smad3 and Smad4 cooperate with c-Jun/c-Fos to mediate TGF- β -induced transcription. Nature 394, 909-913. (Erratum: Nature 396, 491)
- 157) KORNBLUM, H.I., HUSSAIN, R., WIESEN, J., MIETTINEN, P., ZURCHER, S.D., CHOW, K., DERYNCK, R. and WERB, Z. (1998) Abnormal astrocyte development and neuronal death in mice lacking the epidermal growth factor receptor. J. Neurosci. Res. 53, 697-717.
- 158) SEBASTIAN, J., RICHARDS, R.G., WALKER, M.P., WIESEN, J.F., WERB, Z., DERYNCK, R., HOM, Y.K., CUNHA, G.R., and DIAUGUSTINE, R.P. (1998) Activation and function of the epidermal growth factor receptor and erbB-2 during mammary gland morphogenesis. Cell Growth and Differentiation 9, 777-785.
- 159) FILVAROFF, E. and DERYNCK, R. (1998) Bone remodeling: A signalling system for osteoclast regulation. Current Biology 8, R679-R682. Review.
- 160) GRISWOLD-PRENNER, I., KAMIBAYASHI, C., MARUOKA, E.M., MUMBY, M.C., and DERYNCK, R. (1998) Physical and functional interactions between type I transforming growth factor- β receptors and B α , a WD-40 repeat subunit of phosphatase 2A. Molec. Cell. Biol. 18, 6595-6604.
- 161) CHOY, L., and DERYNCK, R. (1998) The type II transforming growth factor- β (TGF- β) receptor-associated protein TRIP-1 acts as a modulator of the TGF- β response. J. Biol. Chem. 273, 31455-31462.
- 162)*DERYNCK, R., ZHANG, Y., and FENG, X.-H. (1998) Smads: transcriptional activators of TGF- β responses. Cell 95, 737-740. Review.
- 163)*MIETTINEN, P.J., CHIN, J.R., SHUM, L., SLAVKIN, H.C., SHULER, C.F., DERYNCK, R., and WERB, Z. (1999) EGF receptor function is necessary for normal craniofacial development and palate closure. Nature Genetics 22, 69-73.
- 164) ZHANG, Y. and DERYNCK, R. (1999) Regulation of Smad signaling by protein associations and signaling crosstalk. Trends Cell Biol. 9, 274-279. Review.

- 165) KORNBLUM, H. I., ZURCHER, S.D., WERB, Z., DERYNCK, R., and SEROOGY, K. (1999) Multiple trophic actions of heparin-binding epidermal growth factor (HB-EGF) in the central nervous system. Eur. J. Neurosci. 11, 3236-3246.
- 166) FILVAROFF, E., ERLEBACHER, A., YE, J.-Q., GITELMAN, S.E., LOTZ, J., HEILLMAN, M., and DERYNCK, R. (1999) Inhibition of TGF- β receptor signaling in osteoblasts leads to decreased bone remodeling and increased trabecular bone mass. Development, 126, 4267-4279.
- 167)*FAN, H. and DERYNCK, R. (1999) Ectodomain shedding of TGF- α and other transmembrane proteins is induced by receptor tyrosine kinase activation and MAP kinase signaling cascades. EMBO J. 18, 6962-6972.
- 168) DERYNCK, R. (1999) Skeletal development in the zebrafish. Nature Genetics 23, 379.
- 169) SHI, W., FAN, H., SHUM, L., and DERYNCK, R. (2000) The tetraspanin CD9 associates with transmembrane TGF- α and regulates TGF- α -induced EGF receptor activation and cell proliferation. J. Cell Biol. 148, 591-601.
- 170) ALLISTON, T.N. and DERYNCK, R. (2000) Transforming growth factor- β in skeletal development and maintenance. In *Skeletal Growth Factors* (ed. E. Canalis), Lippincott Williams and Wilkins, Philadelphia, p. 233-249. Review.
- 171)*CHOY, L., SKILLINGTON, J. and DERYNCK, R. (2000) Roles of autocrine TGF- β receptor and Smad signaling in adipocyte differentiation. J. Cell. Biol. 149, 667-681.
- 172) ZHANG, Y. and DERYNCK, R. (2000) Transcriptional regulation of the TGF- β -inducible, mouse germ-line Ig α constant region gene by functional cooperation of Smad, CREB and AML family members. J. Biol. Chem. 275, 16979-16985.
- 173)*FENG, X.-H., LIN, X., and DERYNCK, R. (2000) Smad2, Smad3 and Smad4 cooperate with Sp1 to induce p15Ink4B expression in response to TGF- β . EMBO J. 19, 5178-5193.
- 174)*KUO, A., ZHONG, C., LANE, W.S. and DERYNCK, R. (2000) Transmembrane transforming growth factor- α tethers to the PDZ-domain containing, Golgi-membrane-associated protein p59/GRASP55. EMBO J. 19, 6427-6439.
- 175) PATIL, S., WILDEY, G.M., BROWN, T.L., CHOY, L., DERYNCK, R., and HOWE, P.H. (2000) Smad7 is induced by CD40 and protects WEHI-231 B lymphocytes from TGF- β -induced growth inhibition and apoptosis. J. Biol. Chem. 275, 38363-38370.
- 176) QING, J., ZHANG, Y. and DERYNCK, R. (2000) Structural and functional characterization of the TGF- β -induced Smad3/c-Jun transcriptional cooperativity. J. Biol. Chem. 275, 38802-38812.

- 177) ZHANG, Y., CHANG, C., GEHLING, D.J., HEMMATI-BRIVANLOU, A., and DERYNCK, R. (2001) Regulation of Smad degradation and activity by Smurf2, an E3 ubiquitin ligase. Proc. Natl. Acad. Sci. USA, 98, 974-979.
- 178) FENG, X.-H., and DERYNCK, R. (2001) Mammalian two-hybrid assays: analyzing protein-protein interactions in the TGF- β signaling pathway. In Two-hybrid systems: Methods and Protocols (ed. P. McDonald) (series: Methods in Molecular Biology, vol. 177) Humana Press. pp 221-239.
- 179)* ALLISTON, T., CHOY, L., DUCY, P., KARSENTY, G., and DERYNCK, R. (2001) TGF- β -induced repression of CBFA1 by Smad3 decreases cbfa1 and osteocalcin expression and inhibits osteoblast differentiation. EMBO J. 20, 2254-2272.
- 180) STOLL, S.W., KANSRA, S., PESCHIK, S., FRY, D.W., LEOPOLD, W.R., WIESEN, J.F., SIBILIA, M., ZHANG, T., WERB, Z., DERYNCK, R., WAGNER, E.F., and ELDER, J.T. (2001) Differential utilization and localization of ErbB receptor tyrosine kinases in skin compared to normal and malignant keratinocytes. Neoplasia 3, 339-350.
- 181)* DERYNCK, R., AKHURST, R.J., AND BALMAIN, A. (2001) TGF- β signaling in tumor suppression and cancer progression. Nature Genetics 29, 117-129 (Erratum Nature Genetics 29, 351) Review.
- 182) AKHURST, R.J. and DERYNCK, R. (2001) TGF- β signaling in cancer: a two-edged sword. Trends Cell Biol. 11, S44-S51. Review.
- 183)* LIU, D., BLACK, B.L., and DERYNCK, R. (2001) TGF- β inhibits muscle differentiation through functional repression of myogenic transcription factors by Smad3. Genes Dev. 15, 2950-2966.
- 184) ROBERTS, A.B. and DERYNCK, R. (2001) Meeting Report: Signaling Schemes for TGF- β . Science STKE 113pe43
http://stke.sciencemag.org/cgi/content/full/OC_sigtrans:2001/113/pe43. Review.
- 185) QING, J. and DERYNCK, R. (2002) TGF- β signaling and Cancer. In The Cancer Handbook (M. Alison, Ed.) Nature Publishing Group, Macmillan Publishers Ltd, 179-194. Review.
- 186) ALLISTON, T. and DERYNCK, R. (2002) Interfering with bone remodeling (News and Views). Nature 416, 686-687.
- 187) LI, C., ZHU, N.L., TAN, R.C., BALLARD, P.L., DERYNCK, R., and MINOO, P. (2002) TGF- β inhibits pulmonary surfactant protein-B gene transcription through SMAD3 interactions with NKX2.1 and HNF-3 transcription factors. J Biol Chem. 277, 38399-38408.

- 188)* SKILLINGTON, J., CHOY, L., and DERYNCK, R. (2002) Bone morphogenetic protein and retinoic acid signaling cooperate to induce osteoblast differentiation of pre-adipocytes. J. Cell Biol. 159: 135-146.
- 189) CHOY, L. and DERYNCK, R. (2003) TGF- β inhibits adipocyte differentiation by Smad3 interacting with CCAAT/Enhancer-binding protein (C/EBP) and repressing C/EBP transactivation function. J. Biol. Chem. 278, 9609-9619.
- 190) FAN, H., TURCK, C.W. and DERYNCK, R. (2003) Characterization of growth factor-induced serine phosphorylation of tumor necrosis factor- α converting enzyme (TACE) and of an alternatively translated polypeptide. J. Biol. Chem. 278, 18617-18627.
- 191) LEE, P.S., CHANG, C., LIU, D. and DERYNCK, R. (2003) Sumoylation of Smad4, the common Smad mediator of TGF- β family signaling. J. Biol. Chem. 278, 27853-27863.
- 192)*DERYNCK, R. and ZHANG, Y.E. (2003) Smad-dependent and Smad-independent pathways in TGF- β family signaling. Nature 425, 577-584. Review.
- 193) *QIN, B.Y., LIU, C., LAM, S.S., SRIMATH, H., DELSTON, R., CORREIA, J.J., DERYNCK, R. and LIN, K. (2003) Crystal structure of IRF-3 transactivation domain reveals mechanism of autoinhibition and virus-induced phospho-activation. Nature Struct. Biol. 10, 913-921.
- 194)*QING, J., LIU, C., CHOY, L., WU, R.-Y., PAGANO, J.S. and DERYNCK, R. (2004) TGF- β /Smad3 signaling regulates IRF-7 function and transcriptional activation of the interferon- β promoter. Molec. Cell. Biol. 24, 1411-1425.
- 195) *LIU, D., KANG, J.S. and DERYNCK, R. (2004) TGF- β -activated Smad3 represses MEF2-dependent transcription in myogenic differentiation. EMBO J 23, 1557-1566.
- 196) PARDOUX, C. and DERYNCK, R. (2004) JNK regulates expression and autocrine signaling of TGF- β 1. Molecular Cell 15, 170-171.
- 197) ALLISTON, T., KO, T.C., CAO, Y., LIANG, Y.-Y., FENG, X.-H., CHANG, C. and DERYNCK, R. (2005) Repression of BMP and activin-inducible transcription by Evi-1. J. Biol. Chem. 280, 24227-24237.
- 198) NAKAGAWA, T., GUICHARD, A., PEREZ CASTRO, C., XIAO, Y., RIZEN, M., ZHANG, H.-Z., HU, D., BANG, A., HELMS, J., BIER, E. and DERYNCK, R. (2005) Characterization of a human rhomboid homolog, p100^{hRho}/RHBDF1, which interacts with TGF- α family ligands. Developmental Dynamics 233, 1315-1331.
- 199) *KANG, J. S., ALLISTON, T., DELSTON, R. and DERYNCK, R. (2005) Repression of Runx2 function by TGF- β through recruitment of class II histone deacetylases by Smad3. EMBO J. 24, 2543-2555.

- 200) QIN, B., LIU, C., SRINATH, H., LAM, S.S., CORREIA, J.J., DERYNCK, R. and LIN, K. (2005) An activator-dependent conformational switch in CBP revealed by crystal structure of the IRF-3/CBP complex. Structure 13, 1269-1277.
- 201) FENG, X.-H. and DERYNCK, R. (2005) Specificity and versatility in TGF- β signaling through Smads. Annu. Rev. Cell Dev. Biol. 21, 659-693. Review.
- 202) MISHRA, L, DERYNCK, R. and MISHRA, B. (2005) Transforming growth factor- β signaling in stem cells and cancer. Science 310, 68-71. Review.
- 203) *BALOOCH, G., BALOOCH, M., NALLA, R.K., SCHILLING, S., FILVAROFF, E.H., MARSHALL, G.W., MARSHALL, S.J., RITCHIE, R.O., DERYNCK, R., and ALLISTON, T. (2005) TGF- β signaling regulates the mechanical properties and composition of bone matrix. Proc. Natl. Acad. Sci. USA 102, 18813-18818.
- 204) HABIG, M., SMOLA, H., DOLE, V.S., DERYNCK, R., PFISTER, H., and SMOLA-HESS, S. (2006) E7 proteins from high- and low-risk human papilloma viruses bind to TGF- β -regulated Smad proteins and inhibit their transcriptional activity. Arch. Virol. 151, 1961-1972.
- 205) DERYNCK, R, CHOY, L., and ALLISTON, T. (2006) Smads in mesenchymal differentiation. In "Smad signal transduction" (ten Dijke, P. and Heldin, C.-H., eds), 93-112. Review.
- 206) WAN, DC, AALAMI, O.O., WANG, Z., NACAMULI, R.P., LORGET, F., DERYNCK, R., and LONGAKER, M.T. (2006) Differential gene expression between juvenile and adult dura mater: a window into what genes play a role in the regeneration of membranous bone. Plastic and Reconstructive Surgery 118, 851-861.
- 207) LEE, M.K., PARDOUX, C., HALL, M.C., LEE, P.S., QING, J., SMITH, S.M., and DERYNCK, R. (2007) TGF- β activates Erk MAP kinase signaling through direct phosphorylation of Shc. EMBO J., submitted 5/22/06. In revision.
- 208) PERÉZ CASTRO, C., PISCOPO, D., NAKAGAWA, T. and DERYNCK, R. (2007) Cornichon regulates transport of TGF- α proteins in metazoan cells. J. Cell Biol., submitted 5/18/06. Revised 11/6/06.
- 209) LAMOUILLE, S and DERYNCK, R. (2007) Activation of mTOR pathway during TGF- β -induced epithelial-to-mesenchymal transition regulates cell size and invasive behavior. J. Cell Biol., submitted 11/26/06.

BOOK

RIK DERYNCK and KOHEI MIYAZONO (eds.)
 The TGF- β family
 Cold Spring Harbor Press, New York
 anticipated publication: January 2007

VIII. Patents

US Patent nr. 4,742,003: TGF- α cDNA and bacterial expression of TGF- α .

US Patent nr. 4,886,747: TGF- β cDNA, overexpression of TGF- β in mammalian cells, recombinant TGF- β .

Patent Application: Compositions and Methods for Employing the Type I TGF- β Receptor Protein.

Patent application: Transdifferentiation of pre-adipocytes into osteoblasts using bone morphogenetic proteins and retinoic acid signaling

IX. Academic Committees and Service

- 1990-91: - Member of ad hoc review committee for appointment, Committee on Academic Personnel
- 1991-92: - Member of Research Evaluation and Allocation Committee
- Member of Faculty Advisory Committee, Dept of Growth and Development
- Chairman of ad hoc review committee for appointment, Committee on Academic Personnel
- Member of Search Committee, Department of Growth and Development
- Member of Research Space Planning Committee, School of Dentistry
- 1992-93: - Member of Graduate Council
- Member of Research Evaluation and Allocation Committee
- Executive group member of Oral Biology Curriculum Committee
- Member of "M.D. with Thesis" Committee
- Chairman of the Committee on Basic Research to develop a Comprehensive Cancer Center at U.C.S.F.
- Member of ad hoc review committee for appointment, Committee on Academic Personnel
- 1993-94: - Chairman of the Committee on Basic Research to develop a Comprehensive Cancer Center at U.C.S.F.
- Member of the Executive Planning Committee of the Comprehensive Cancer Center at U.C.S.F.
- Member of the Curriculum Committee of the Biomedical Sciences Program
- Member of Research Evaluation and Allocation Committee
- Member of Faculty Development Committee
- Member of "M.D. with Thesis" Committee
- Member of ad hoc review committee for appointment, Committee on Academic Personnel
- Member of Search Committee, Department of Stomatology
- 1994-95: - Chairman of the Committee on Basic Research to develop a Comprehensive Cancer Center at U.C.S.F.
- Member of Research Evaluation and Allocation Committee
- Member of Faculty Development Committee
- Member of "M.D. with Thesis" Committee
- Member of Search Committee, Department of Stomatology
- 1995-96: - Member of Research Evaluation and Allocation Committee
- Member of "M.D. with Thesis" Committee
- Member of ad hoc review committee for appointment, Committee on Academic Personnel
- 1996-97: - Member of Research Evaluation and Allocation Committee
- Member of "M.D. with Thesis" Committee

- 1997-98: - Member of Research Evaluation and Allocation Committee
 - Member of "M.D. with Thesis" Committee
 - Member of ad hoc review committee for appointment, Committee on Academic Personnel
- 1998-99: - Member of Research Evaluation and Allocation Committee
 - Member of "M.D. with Thesis" Committee
 - Member of ad hoc review committee for appointment, Committee on Academic Personnel
- 1999-00: - Member of Research Evaluation and Allocation Committee
 - Member of ad hoc review committee for appointment, Committee on Academic Personnel
 - Member of Search Committee, Department of Growth and Development
 - Member of Search Committee, Department of Orthopedic Surgery
- 2000-01: - Member of Research Evaluation and Allocation Committee
 - Member of Faculty Council, School of Dentistry
 - Member of Search Committee, Department of Growth and Development
 - Member of Search Committee for a Chair, Department of Orthopedic Surgery
- 2001-02: - Member of the Research Evaluation and Allocation Committee
 - Chair of two ad hoc review committees for appointment, Committee on Academic Personnel
 - Member of the Faculty Council, School of Dentistry
 - Member of the Realignment Commission, School of Dentistry
 - Member of the Parnassus Heights Leadership Council
 - Member of the Developmental and Stem Cell Biology Steering Committee
 - Member of ad hoc review committees for appointment, Committee on Academic Personnel
 - Member of the Executive Committee of the UC Systemwide Biotechnology Research and Education Program (2002-2005)
- 2002-03: - Member of the Research Evaluation and Allocation Committee
 - Member of the Faculty Council, School of Dentistry
 - Member of the Parnassus Heights Leadership Council
 - Member of the Developmental and Stem Cell Biology Steering Committee
 - Member of the Executive Committee of the UC Systemwide Biotechnology Research and Education Program (2002-2005)
 - Chair or member of ad hoc review committees for appointment, Committee on Academic Personnel
 - Member of the Dean's Council, School of Dentistry
 - Member of the Executive Committee of the Oral and Craniofacial Science Graduate Program
 - Member of the Basic Sciences Research Resources Oversight Committee
- 2003-04: - Member of the Research Evaluation and Allocation Committee

- Vice Chair of the Faculty Council, School of Dentistry
- Member of the Parnassus Heights Leadership Council
- Member of the Developmental and Stem Cell Biology Steering Committee
- Member of the Executive Committee of the UC Systemwide Biotechnology Research and Education Program (2002-2005)
- Chair or member of ad hoc review committees for appointment, Committee on Academic Personnel
- Member of the Dean's Council, School of Dentistry
- Member of the Executive Committee of the Oral and Craniofacial Science Graduate Program
- Member of the Basic Sciences Research Resources Oversight Committee

- 2004-05:
- Member of the Research Evaluation and Allocation Committee
 - Vice Chair of the Faculty Council, School of Dentistry
 - Member of the Parnassus Heights Leadership Council
 - Member of the Executive Committee of the UC Systemwide Biotechnology Research and Education Program (2002-2005)
 - Chair or member of ad hoc review committees for appointment, Committee on Academic Personnel
 - Member of the Dean's Council, School of Dentistry
 - Member of the Executive Committee of the Oral and Craniofacial Science Graduate Program
 - Chair and member of the Parnassus Heights Core Facilities Committee
 - Member of the Chancellor's Committee on Core Facilities
 - Chair and member of the Basic Sciences Research Resources Oversight Committee
 - Member of the Stem Cell Research Coordinating Committee
 - Member of the Stem Cell Research Program Committee

- 2005-06:
- Vice Chair of the Faculty Council, School of Dentistry
 - Member of the Parnassus Heights Leadership Council
 - Chair or member of ad hoc review committees for appointment, Committee on Academic Personnel
 - Member of the Dean's Council, School of Dentistry
 - Chair and member of the Parnassus Heights Core Facilities Committee
 - Chair and member of the Basic Sciences Research Resources Oversight Committee
 - Member of the Stem Cell Research Coordinating Committee
 - Member of the Stem Cell Research Program Committee

X. TEACHING RESPONSIBILITIES

1990-91:	Fall:	GD 110: lecturing, commitment: 4 hrs
	Spring:	B 246: lecturing and discussion groups: 10 hrs
1991-92:	Fall:	IDS 100: histology labs, commitment: 96 hrs GD 110: lecturing, commitment: 4 hrs OB 220: lecturing, commitment: 4 hrs OB 270: discussion group, commitment: 4 hrs CB 212: discussion groups, commitment: 40 hrs
	Winter:	OB 220: course director, commitment: 25 hrs OB 270: course director discussion groups: 35 hrs
	Spring:	B 246: lecturing and discussion groups: 10 hrs
1992-93:	Fall:	IDS 100: lecturing, commitment: 10 hrs IDS 100: histology labs, commitment 96 hrs GD 110: lecturing, commitment: 4 hrs CB 212: discussion groups, commitment: 40 hrs
	Winter:	GD 210: lecturing, commitment: 10 hrs
	Spring:	BMS 210: course director and lecturing, commitment: 60 hrs OB 221: lecturing, commitment: 4 hrs
1993-94:	Fall:	IDS 100: lecturing, commitment: 10 hrs IDS 100: histology labs, commitment: 10 hrs
	Winter:	BMS 210: course director and lecturing, commitment: 60 hrs GD 210: lecturing, commitment: 18 hrs
	Spring:	OB 221: lecturing, commitment: 6 hrs CB 212: discussion groups, commitment: 40 hrs
	Summer:	GD 210: lecturing, commitment: 18 hrs
1994-95:	Fall:	IDS 100: lecturing, commitment: 10 hrs IDS 100: histology labs, commitment: 10 hrs BMS 210: lecturing, commitment: 30 hrs GD110: lecturing, commitment: 6 hrs OB221: lecturing, commtment: 6 hrs
	Winter:	BMS 210: lecturing, commitment: 30 hrs
	Spring:	CB 212: discussion groups, commitment: 40 hrs
	Summer:	Medicine 411: lecturing, commitment 20 hrs
1995-96:	Fall:	IDS 100: lecturing, commitment: 10 hrs IDS 100: histology labs, commitment: 10 hrs GD110: lecturing, commitment: 6 hrs OB221: lecturing, commitment: 6 hrs
1996-97:	Fall:	IDS 100: lecturing, commitment: 16 hrs IDS 100: histology labs, commitment: 10 hrs

1997-98:	Fall:	IDS 100: lecturing, commitment: 16 hrs IDS 100: histology labs, commitment: 10 hrs
	Spring:	CB 212: discussion groups, commitment: 40 hrs
1998-99:	Fall:	IDS 100: lecturing, commitment: 16 hrs IDS 100: histology labs, commitment: 10 hrs
	Spring:	CB 212: discussion groups, commitment: 40 hrs
1999-2000:	Fall:	IDS 100: lecturing, commitment: 16 hrs IDS 100: histology labs, commitment: 10 hrs
	Spring:	CB 212: discussion groups, commitment: 40 hrs
2000-01:	Fall:	IDS 100: lecturing, commitment: 16 hrs IDS 100: histology labs, commitment: 10 hrs
	Spring:	CB 212: discussion groups, commitment: 40 hrs
2001-02:	Spring:	CB 212: discussion groups, commitment: 40 hrs
2002-03	Winter:	OB 220: lecturing, commitment: 4 hrs
	Spring:	CB 245: lecturing, commitment: 80 hrs
2002-03	Spring:	CB 212: discussion groups, commitment: 40 hrs
2003-04	Winter:	OB 220: lecturing, commitment: 4 hrs
	Spring:	CB 245: lecturing, commitment: 80 hrs
2004-05	Winter:	OB 220: lecturing, commitment: 4 hrs
	Spring:	CB 245: lecturing, commitment: 80 hrs

XI. GRANT SUPPORT

CURRENT

National Institutes of Health (NCI), 1-RO1-CA54826

"Molecular physiology of TGF- α in tumor and normal cells"

4/8/92-3/31/97

\$ 157,524 for first year, \$ 861,638 for total budget period (direct costs)

Renewal: "Molecular characterization of TGF- α -associated proteins"

10/1/97-9/30/00

\$ 174,223 for first year, \$ 1,084,652 for total budget period (direct costs)

Renewal: "Function of transmembrane TGF- α -associated proteins"

1/0/01-12/31/05

\$ 200,000 for first year, \$ 1,175,000 for total budget period (direct costs)

Pending renewal, 4-RO1-CA5482

"Transmembrane TGF- α presentation and ectodomain shedding"

12/01/06-11/30/11

\$ 225,000/year

National Institutes of Health, 1-RO1-CA63101

"Functional Studies on the TGF- β Receptors"

1/1/95-12/31/98, extended until 5/31/99

\$ 142,961 for first year, \$ 607,079 for total budget period (direct costs)

Renewal: "Mechanisms of TGF- β receptor and Smad signaling"

1/1/99-12/31/03

\$ 251,030 for first year, 1,331,360 for total budget period (direct costs)

Renewal: "TGF- β - and Smad-mediated regulation of gene expression"

1/1/04-12/31/08

\$ 295,337 for first year, \$ 1,830,249 for total budget period (direct costs)

National Institutes of Health, 1-P01-HL60231 (D. Warburton, P.I.)

Project III: "Mechanism of TGF- β -induced apoptosis"

4/1/98-3/31/03

\$132,717 for first year, \$676,464 for the total budget period (direct costs)

Renewal :

Project III: Non-Smad mechanisms of TGF- β signaling.

4/06/05- 4/05/10

\$243,317 for first year, \$1,250,000 for the total budget period (direct costs)

Arthritis Foundation, Innovative Research Grant

"Pre-adipocyte differentiation and osteoblast conversion in vivo"

7/1/05-6/30/07

\$100,000/year

UCSF Academic Senate

“Pre-adipocyte conversion into myoblasts”

7/15/06-7/14/07

\$35,000

PENDING

National Institutes of Health (NCI), R21-CA125190

“TGF- β receptor sumoylation and cell behavior”

12/01/06-11/31/08

Molecular Dystrophy Association

Conversion of pre-adipose cells into muscle cells

01/01/07-12/31/09

National Institutes of Health (NIAMS)

Conversion of pre-adipose cells into muscle cells.

PAST

Academic Senate UCSF, Individual Investigator Research Award (509731-19900)

"Abolition of functional TGF- α expression in human tumor cells"

7/1/91-6/30/92

\$ 15,000

Academic Senate UCSF, Shared Equipment Grant

opportunity : -2-509727-09544-4

6/1/91-6/30/92

\$ 22,965

BRSF UCSF: Individual Investigator Research Award

Controllable v-fos transformation and tumorigenicity of multipotential mesenchymal stem cells

3/1/92-4/1/92

\$ 5,000

Academic Senate UCSF, Shared Equipment Grant

code 2-509739-36523-4: \$ 1,000

code 2-509739-34935-4: \$ 11,000

3/1/92-6/30/92

REAC UCSF: Individual Investigator Research Award

Controllable v-fos transformation and tumorigenicity of multipotential mesenchymal stem cells

Accounting code 2-520366-35835

4/1/92-4/1/93

\$ 18,245

National Institutes of Health (NIAMS), Shannon award
"Role of the TGF- β family in bone and cartilage development"
(1-RO1-AR41126)
9/1/92-4/30/93
\$ 40,000 (direct costs)

Cancer Research Coordinating Committee
Role of endogenous TGF- β synthesis in invasion and metastasis
Postdoctoral Associate Grant Support
7/1/92-12/31/93
\$ 25,000

American Cancer Society, Grant BE-134
"The cell physiology of TGF- α "
1/1/92-12/31/95,
\$ 80,000 per year, \$ 320,000 for total budget period (direct costs)

Tobacco-related disease research program, 3RT-0104
Does TGF-beta modulate metastasis of small cell lung carcinoma?
7/1/92- 6/30/95
\$ 119,772 for first year, \$ 390,039 for total budget period (direct costs)

American Cancer Society, CB 51
How does endogenous TGF-beta expression affect metastasis?
1/1/93- 12/31/94
\$ 84,000 for first year, \$ 168,000 for total budget period (direct costs)

National Institutes of Health, 1-RO1 41328
Bone stem cells, osteoblasts and TGF- β in osteoporosis (A. Kahn, P.I., R.
Derynck, coP.I.)
1/1/93-12/31/96
\$ 117,464 for first year, \$ 509,816 for total budget period (direct costs)

National Institutes of Health, 1-RO1-AR41126
"Role of the TGF- β family in bone and cartilage development"
5/1/93-4/30/97
\$ 132,487 for first year, \$570,604 for total budget period (direct costs)

National Institutes of Health, Center Grant P50 DE-10306
Project IV: "The role of vgr-1 (BMP-6) in osteoblastic differentiation"
12/1/92-11/30/97, extended to 5/31/99
\$ 100,542 for first year, \$537,091 for total budget period (direct costs)

REAC UCSF, Shared Equipment Grant
Mouse microarray facility at UCSF-Parnassus
September 2000

\$50,000

National Institutes of Health, 1R13HD/DE40990

FASEB Conference: The TGF- β superfamily: Signaling and Development

July 7-11, 2001

\$6,000

Arthritis Foundation

"TGF- β and Smad signaling in osteoblast differentiation"

7/1/98-6/30/01

\$ 79,923 for first year, 239,923 for total budget period (direct costs)

Sandler Award

Equipment grant for the mouse microarray consortium at the Parnassus campus

3/1/01-2/28/03

\$ 100,000 for the first year, \$ 300,000 for total budget period

National Institutes of Health, Center Grant 1-P60 DE-13058

Project III: "Skeletal augmentation by myoblast and adipocyte transdifferentiation into osteoblasts"

8/1/99-7/31/04 (non-funded extension until 7/31/05)

\$ 116,937 for first year, \$621,944 for total budget period (direct costs)

National Institutes of Health, "Adhesion and Proliferation in Oral Cancer Progression"

1-PO1 DE13904.

Project I: TGF- α processing in oral cancer.

6/1/01-5/30/06

\$ 145,295 for first year, \$ 850,000 for total budget period (direct costs)

XII. AWARDS AND FELLOWSHIPS TO MEMBERS OF THE LAB

Rainer Brachmann, M.D., Ph.D., (1988-1990) Deutsche Forschungsgemeinschaft
 Reinhard Ebner, Ph.D., (1989-1990) Deutscher Akademischer Austauschdienst
 (1990-1992) Deutsche Forschungsgemeinschaft
 Lillian Shum, Ph.D. (1992-1994) Tobacco-Related Disease Research Program
 (1994-1997) Leukemia Society of America Special Fellow Award
 Deborah Aghib, Ph.D. (1992-1997) American Heart Association Career Development Award
 Päivi Miettinen, M.D., Ph.D. (1993-1995) European Society for Pediatric Endocrinology
 Ellen Filvaroff, Ph.D. (1994-1996) Arthritis Foundation postdoctoral fellowship
 (1995-1997) American Heart Association postdoctoral fellowship
 Ruey-Hwa Chen, Ph.D. (1994-1995) Tobacco-Related Disease Research Program
 (1995-1998) Leukemia Society of America Special Fellow Award
 Xin-Hua Feng, Ph.D. (1995-1998) American Cancer Society postdoctoral fellowship
 Lisa Choy, Ph.D. (1996-1999) American Cancer Society postdoctoral fellowship
 (1999-2001) American Heart Association postdoctoral fellowship
 (2000-2003) NIH K01 career advancement grant
 Irene Griswold-Prenner, Ph.D. (1996-1999) American Heart Association postdoctoral fellowship
 Rui-yun Wu, Ph.D. (1997-2000) Leukemia Society of America postdoctoral fellowship
 Ying Zhang, Ph.D. (1997-1999) American Lung Association postdoctoral fellowship
 Wen Shi, Ph.D. (1997-1999) American Lung Association postdoctoral fellowship
 (1999-2001) Tobacco-Related Disease Research Program postdoctoral fellowship
 Huizhou Fan, Ph.D. (1998-2000) Tobacco-Related Disease Research Program
 Tamara Alliston, Ph.D. (1999-2002) Arthritis Foundation postdoctoral fellowship
 (2002-2005) Arthritis Foundation career development award
 Cuiling Zhong, Ph.D. (1999-2002) NIH postdoctoral fellowship
 Jing Qing, Ph.D. (2000-2002) American Heart Association postdoctoral fellowship
 Cécile Pardoux, Ph.D. (2001-2004) Leukemia and Lymphoma Society postdoctoral fellowship
 Pierre Lee, Ph.D. (2001-2003) Tobacco-Related Disease Research Program postdoctoral fellowship
 Jeremy Skillington, Ph.D. (2001-2003) Arthritis Foundation postdoctoral fellowship
 (2002-2005) NIH postdoctoral fellowship
 Dong Liu, Ph.D. (2002-2003) NIH postdoctoral fellowship
 Isabella Imhof, Ph.D. (2001-2003) Swiss National Research Fund (SNF) postdoctoral fellowship
 (2003-2005) American Lung Association postdoctoral fellowship
 Carolina Perez Castro, Ph.D. (2003-2005) Pew Foundation postdoctoral fellowship
 Yang Xiao, Ph.D. (2003-2005) Tobacco-Related Disease Research Program postdoctoral fellowship
 Cheng Liu, Ph.D. (2004-2006) American Heart Association postdoctoral fellowship
 Hongjun Wang, Ph.D. (2004-2006) Canadian Institutes of Health Research postdoctoral fellowship
 Yuriy Shostak, Ph.D. (2005-2008) NIH postdoctoral fellowship
 Jong Seok Kang, Ph.D. (2006-2010) American Heart Association career development award
 Samy Lamouille, Ph.D. (2006-2009) Leukemia and Lymphoma Society postdoctoral fellowship

Special Awards

Stephen Gitelman, M.D. (1992-1994) Lawson-Wilkins Clinical Scholar's Award
Päivi Miettinen, M.D., Ph.D. (1997) European Society of Pediatric Endocrinology Junior
Investigator Award
Ellen Filvaroff, Ph.D. (1997) American Society of Bone and Mineral Research Junior
Investigator Award
Alfred Kuo, M.D.-Ph.D. student (1997) UCSF Chancellor's Award
Tamara Alliston, Ph.D. (2002-2007) Hulda Irene Duggan Arthritis Investigator

XIII. TRAINEES:

Previous trainees:

- Wilcox, Josiah, Ph.D., (1986-87) postdoctoral fellow, became assistant professor at Emory University, currently associate professor.
- Nagashima, Mariko, Ph.D., (1986-87) postdoctoral fellow, became scientist at Berlex Corp.
- Richmond, Ann, Ph.D., (1987) on sabbatical, became associate professor at Vanderbilt University Medical School; currently professor.
- Balentien, Eddy, (1987-90) Ph.D. student Emory University, became postdoctoral fellow University of Pittsburgh.
- Korc, Murray, M.D., (1988) on sabbatical, currently professor and division chair at U.C. Irvine Medical School
- Tamm, Joseph, Ph.D., (1987-89) postdoctoral fellow, became scientist at Clorox Corp.
- Wen, Duanzhi, Ph.D., (1987-89) postdoctoral fellow, became scientist at Amgen Corp.
- Miller, Duncan, Ph.D., (1988-89) visiting postdoctoral fellow from Vanderbilt University Medical School (lab of Hal Moses)
- Brachmann, Rainer, M.D., Ph.D., (1988-90) postdoctoral fellow, became specializing oncologist at Johns Hopkins University Medical School, currently assistant professor at Washington University, St. Louis.
- Arrick, Bradley, M.D., Ph.D., (1988-90) postdoctoral fellow, became assistant professor at Dartmouth Medical School, currently associate professor.
- Lopez, Alfredo, M.D., (1988-91), visiting scientist, became assistant professor at U.C. San Francisco, currently full-time clinician.
- Kobrin, Michael, Ph.D., (1988-91), postdoctoral fellow, became assistant professor at U.C. Irvine Medical School, currently scientist at Stratagene Corp.
- Herbsman, Oded, (1991-1992), M.D. student, Duke University Medical School and U.C. San Francisco.
- Vogel, Ann Marie, D.D.S., (1991-1992), Ph.D. student, currently clinician in private practice, San Francisco.
- Gazit, Dan, D.D.S., Ph.D., (1990-1992) visiting assistant professor, became assistant professor, Hadassah University Dental School, Jerusalem, Israel, currently associate professor.
- Reeves, Steve, Ph.D., (1991-1993) postdoctoral fellow, became assistant professor Harvard Medical School, Mass. General Hospital, Boston.
- Ebner, Reinhard, Ph. D., (1989-1994) postdoctoral fellow, became scientist at Genomymx Corp.
- Fromer, Erik, Ph.D. student (1991-1994), continued as M.D. student Duke University Medical School, currently full-time clinician.
- Gitelman, Stephen, M.D. (1992-1997), visiting assistant professor, currently associate professor UCSF
- Lawler, Sean, Ph.D., (1992-1994) postdoctoral fellow, became postdoctoral fellow in the laboratory of A. Sobel (INSERM, Paris), currently research assistant professor Harvard Medical School, Mass. General Hospital, Boston.
- Aghib, Deborah, Ph.D., (1993-1994) research assistant specialist, took time out from research.
- Lillian Shum, Ph.D., (1991-1995) postdoctoral fellow, became senior staff fellow at N.I.H. - N.I.A.M.S., Bethesda, MD.
- Miettinen, Päivi, M.D., Ph.D., (1993-1995) postdoctoral fellow, became assistant

- professor at University of Helsinki, Finland.
- Song, Jianguo Ph. D. (1993-1995) postdoctoral fellow, became research scientist in the Shanghai Institute of Biochemistry, Academia Sinica, Shanghai, China; currently professor
- Chen, Ruey-Hwa, Ph.D., (1992- 1996) postdoctoral fellow, became associate professor at the Taiwan University, Taipei, Taiwan.
- Zhang, Hong-Zhong, Ph.D., (1995-1997), postdoctoral fellow, became postdoctoral fellow at San Francisco General Hospital.
- Bauzon, Maxine, Ph.D. student (1995-1997), went to business school.
- Verlhac-Chédotal, Marie-Hélène, Ph.D. (1995-97) postdoctoral fellow, currently staff scientist at INSERM, Paris.
- Erlebacher, Adrian, (1992-97) M.D.-Ph.D. student, continued his M.D. training at UCSF, currently postdoctoral fellow in Harvard Medical School.
- Filvaroff, Ellen, Ph.D., (1992-Oct. 1997), postdoctoral fellow, became scientist at Genentech, South San Francisco.
- Griswold-Prenner, Irene, Ph.D. (1993- Dec. 1997), postdoctoral fellow, became scientist at Athena Neurosciences, South San Francisco.
- Wu, Rui-yun (Rae) Ph.D. (April 1996-January 1998) postdoctoral fellow, decided to stay home to raise family.
- Chen, Mingzhi (Michelle), Ph.D. (May 1997- May 1998) postdoctoral fellow, became scientist at Scios Corp.
- Kuo, Alfred, M.D.-Ph.D. student (1993-September 1998), continued his M.D. training at UCSF; currently specializing in orthopedic surgery at U.C. Davis.
- Luan, Dongmei, Ph. D. (March 1998-November 1998), postdoctoral fellow, moved to Hongkong for family-related reasons.
- Jeremy Skillington (June 1998- December 1998), visiting Ph.D. student, continued as postdoctoral fellow in this lab.
- Tien Ko, M.D. (July 1998- July 1999), visiting assistant professor, continued as associate professor at University of Texas Medical Branch, Galveston.
- Xin-Hua Feng, Ph.D. (November 1993-October 1999) postdoctoral fellow, since 7/98 research assistant professor, became assistant professor at Baylor College of Medicine, Houston.
- Michael Rizen (July 1997-October 1999), M.D.-Ph.D. student, continued his M.D. training at UCSF.
- Ying Zhang, Ph.D. (July 1995-March 2000), postdoctoral fellow, became staff scientist at the National Cancer Institute (NIH), Bethesda, MD.
- Wen Shi, Ph.D. (January 1996-July 2000) postdoctoral fellow, became scientist at Exelexis
- Rui Lin, Ph.D. (October 1999- August 2000), postdoctoral fellow, became postdoctoral scientist at Genentech
- Heejeong Yoon, Ph.D. (March 1999- May 2001), postdoctoral fellow, became scientist
- Cuiling Zhong, Ph.D. (June 1998- August 2001), postdoctoral fellow, became scientist at Eli Lilly.
- Huizhou Fan, Ph.D. (December 1997- August 2001), postdoctoral fellow, became assistant professor at UMDNJ.
- Jing Qing, Ph.D. (February 1998- February 2002), postdoctoral fellow, became scientist at Exelexis.

Takatoshi Nakagawa, Ph.D. (June 1999-August 2002), postdoctoral fellow, became assistant professor at University of Osaka, Japan.

Jeremy Skillington, Ph.D. (March 1999- December 2002), postdoctoral fellow, appointed in business development at Genentech.

Jeongwon Sohn, Ph.D. (March 2002- February 2003), visiting associate professor, currently associate professor, Seoul National University, Korea.

Dong Liu, Ph.D. (December 1999- October 2003), postdoctoral fellow, currently scientist at Novartis Institute of Biomedical Research, Boston

Marie Hall, Ph.D. (March 2002- June 2005), postdoctoral fellow, currently scientist at Nuvelo.

Si Wan Kim, Ph.D. (June 2004 – September 2005), postdoctoral fellow, currently postdoctoral fellow in lab of Julie Baker (Stanford)

Jian Huang, M.D. (November 2002 – October 2005), postdoctoral fellow, became assistant professor at Baylor College of Medicine.

Pierre Lee, Ph.D. (February 2000 – December 2005), postdoctoral fellow, became scientist

Cécile Pardoux, Ph.D (April 2000-March 2006), postdoctoral fellow, currently specialist at Diabetes Center, UCSF.

Yuriy Shostak, Ph.D. (October 2002 – April 2006), postdoctoral fellow (shared with K. Yamamoto), became scientist at Abgenix.

Tamara Alliston, Ph.D. (June 1998-July 2002), postdoctoral fellow; (July 2002- May 2006) adjunct assistant professor, became assistant professor at U.C. San Francisco.

Florence Lorget, D.Pharm, Ph.D (July 2002 – August 2006), postdoctoral fellow, currently scientist at XXX.

Current members of the lab

Lisa Choy, Ph.D. (December 1994-September 2000) postdoctoral fellow
(September 2000-September 2001) research assistant cell biologist
(September 2001- present) adjunct assistant professor

Jong Seok Kang, Ph.D. (June 2001-), postdoctoral fellow

Isabella Imhof, Ph.D. (December 2001-), postdoctoral fellow

Cheng Liu, Ph.D. (February 2002-), postdoctoral fellow

Yang Xiao, M.D., Ph.D. (April 2002 -), postdoctoral fellow

Carolina Perez Castro, Ph.D (October 2002 -), postdoctoral fellow

Denise Piscopo, Ph.D. (May 2003 -), postdoctoral fellow

Samy Lamouille, Ph.D. (March 2004 -), postdoctoral fellow

Hongjun Wang, Ph.D. (March 2004 -), postdoctoral fellow

Liyu Wu, Ph.D. (June 2004 -), postdoctoral fellow

Pinglong Xu, Ph.D. (June 2004 -), postdoctoral fellow